

## CONTRACT RESEARCH

# **The Sustainability of Professional Development in Literacy**

### **Part 2: School-Based Factors Associated with High Student Achievement**

Report to the Ministry of Education

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# **THE SUSTAINABILITY OF PROFESSIONAL DEVELOPMENT IN LITERACY**

## **PART TWO**

### **School-Based Factors Associated with High Student Achievement**

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Part Two of a report prepared for the participating schools and the Ministry of Education  
on the sustainability of professional development in literacy



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## **EXECUTIVE SUMMARY**

This report examines the sustainability of professional development following the completion of an intensive course in literacy acquisition by teachers of Year One students and their literacy leaders in seven schools. The research on which it is based had two aims. The first was to examine the ways in which the professional development changed teachers' expectations of student achievement over the period of the course. The findings of this study are reported in Part One of this report. The second aim was to examine issues of sustainability once the course had finished and the findings are reported here (Part Two). Two issues related to sustainability were examined. These included the trends in student achievement over all participating schools over three years, and the school-based factors that were associated with sustainability because it is these that exert the major influence on teacher implementation of new practices (Cohen & Ball, 1999; Darling-Hammond, 1997; Goodlad, 1984; Robertson & Allan, 1999).

### **Background**

The professional development in early literacy teaching was part of the initiative to strengthen education in Mangere and Otara (SEMO) that was launched in these two South Auckland suburbs in 1997. This initiative has been extensively described in Ministry reports (e.g. Annan, 1999) and research evaluations (Robinson, Timperley, & Bullard, 2000; Timperley, Robinson, & Bullard, 1999; Timperley & Lam, 2002) and readers are referred to these reports for further details. The professional development in early literacy acquisition was part of the "Early Childhood Primary Link" aspect of SEMO and was developed and delivered by Dr Gwenneth Phillips of the Child Literacy Foundation. The theoretical underpinnings of the professional development and the resulting significant gains in student achievement are reported in Phillips, McNaughton and MacDonald (2001). The schools that took part in this research all had teachers participating in this professional development during 2000.

### **Issues in Professional Development and its Sustainability**

Continual updating, deepening, and refining of knowledge and skills through professional development is an integral part of any profession. Teaching is no exception. Professional





development is viewed as an essential mechanism for teachers to improve their knowledge and expertise to enhance the quality of their students' achievement. This need is most urgent in New Zealand's Decile One schools where many students have traditionally been academically unsuccessful. The ever-changing knowledge base in our society means that a teaching force that uses yesterday's professional knowledge to prepare today's students for tomorrow's society can no longer be tolerated. The associated social costs are too high.

A body of empirical evidence has shown that achieving success for students' learning depends on both the learning of individual school professionals *and* improvements in the capacity of the whole school organisation to solve problems and create new ways of doing things (Sparks & Hirsh, 1997). This means that schools need to develop and sustain the individual and collective professional learning necessary to promote and enhance student learning by creating professional learning communities (Stoll, 1999). This collective, school-based focus where professional learning is built into teachers' everyday working responsibilities is considered more effective than certified courses, inspirational speeches and isolated workshops (Hargreaves, 1997).

## **Forms of Professional Development**

Professional development is delivered in many different forms that are underpinned by different assumptions about teacher learning. Traditional forms focus on learning content knowledge with the underlying assumption that teachers are knowledge recipients. An approach more consistent with that of professional learning communities assumes that teaching professionals need to have a far more active role than simply being knowledge recipients. In this view, each teacher is expected to be "a scholar, an intellectual, and a knowledge worker oriented toward the interpretation, communication, and construction of such knowledge in the interests of student learning" (Shulman, 1999, p. xiii). From this perspective, professional development programmes are effective if they enhance teaching professionals' capacities to co-construct and co-evaluate new professional knowledge of best practices (e.g. Ball & Cohen, 1999; Burroughs, Schwartz, & Hendricks-Lee, 2000; Cochran-Smith & Lytle, 1999; Putnam & Borko, 2000). Thompson and Zeuli (1999) argue that this process is inadequate unless it brings about conceptual changes in teachers' thinking about knowledge, teaching and learning, especially when addressing long-term and apparently intransigent problems, such as the low achievement of children



from low-income communities. These authors describe five characteristics for this type of professional development as follows:

- a. It creates a sufficiently high level of cognitive dissonance to disturb the equilibrium between teachers' existing beliefs and practices on the one hand and their experience with subject matter, students' learning, and teaching on the other.
- b. It provides time, contexts, and support for teachers to think – to work at resolving the dissonance through discussion, reading, writing, and other activities.
- c. It ensures that the dissonance-creating and dissonance-resolving activities are connected to the teachers' own students and contexts, or something like them.
- d. It provides a way for teachers to develop a repertoire for practice that is consistent with the new understanding that teachers are building.
- e. It provides continuing help in a cycle of surfacing new issues and problems, deriving new understanding from them, translating these new understandings into performance, which in turn, raises new problems.

This awareness that more than knowledge needs to change through professional development has led to a focus on the context and situation in which the professional learning might best occur. A course, removed from the school environment, may challenge teachers' thinking, but for this challenge to result in sustained changes in teaching and learning, the professional development needs to be either situated in the schools or to have off-site material followed up in this environment. The norms and culture of particular schools have a compelling influence on how teaching and learning take place (Barth, 1990; Fullan & Hargreaves, 1992; Murphy, 1991). A school's cultural environment, however, may debilitate rather than facilitate individual and collective professional learning if it is characterised by any one of the following conditions identified by Goodlad (1984):

- a) Teachers are isolated because they teach behind closed doors and have little time within rigid daily schedules to meet, plan, observe, and talk with each other;



- b) Teachers lack a sense of power and efficacy and feel they are at the bottom of the hierarchy, while the decisions and evaluations affecting them are being made “up there” someplace;
- c) Information about student achievement is seen to be for political, evaluative, or coercive purposes and it neither involves nor instructs the school staff members in reflecting on, evaluating, and improving curriculum and instruction;
- d) Educational innovations are viewed as mere “tinkering” with the instructional programmes because there are so many of them, and their impact is so limited.

Rather than institutionalising change, these types of traditional practices and policies are usually so deeply entrenched that the status quo is maintained despite the best efforts of external professional developers. On the other hand, the individual and collective learning capacity of a school is likely to be enhanced if schools where the teachers pursue clear, shared purposes for student learning engage in collaborative activities to achieve these purposes, and take collective responsibility for student learning (Cohen & Ball, 1999; Darling-Hammond, 1997; Hord, 1997; Kruse, Louis, & Bryk, 1995; Leithwood, Jantzi, & Fernandez, 1995; Robertson & Allan, 1999).

In this study, these types of in-school processes in seven schools were examined to determine if they were related to any differences in student achievement following intensive professional development in early literacy teaching.

## **Method**

The children's achievement gains were assessed from the text level and BURT scores obtained in the schools' Observation Surveys (Clay, 1993a) of all children turning six years. The reliability of these data was established through random checks undertaken as part of an evaluation of the professional development itself, completed by Phillips, McNaughton and MacDonald (2001). The two scores were combined to establish a “reading” score for each school so that multi-variate statistics could be used to determine differences and similarities in the achievement in the different schools. The achievement



scores were analysed over three years. Year One was the baseline year prior to the professional development and contained all the scores of children turning six years during that year. Year Two comprised the scores of all the children turning six years old during the six months of the professional development and the following six months. Year Three included the scores of children turning six years during the following year.

In-school processes were studied over a period of 18 months. Two rounds of interviews of literacy leaders and teachers of Year One students were conducted in each school together with observations of meetings and classroom teaching. Following each round of interviews and observations individual school reports detailing the researchers' conclusions were written and discussed with each school.

## **Results**

Over all the schools, the achievement gains reported by Phillips, McNaughton and MacDonald (2001) continued into Year Three. Text level scores improved significantly ( $t=5.45$ ,  $p<0.01$ ) from a mean of 6.00 in Year One to a mean of 7.93 in Year Three. BURT gains were less but still significant ( $t=2.67$ ,  $p<0.01$ ). Not surprisingly, the gains in the combined reading score were also significant ( $t=4.04$ ,  $p<0.01$ ) with an effect size of 0.28.

These overall patterns disguise the difference in the patterns of achievement in each school. On the basis of their reading scores in Year Three, they were divided into three groups. The reading scores in Group One schools (A and B) were significantly lower than in Group Two schools (C, D and E), which, in turn, were significantly lower than Group Three schools (F and G). Achievement in these Group Three schools was similar to national profiles of achievement. In the remainder of this report, we sought to identify the school-related factors associated with these differences.

Contextual factors, such as the schools' decile rating (schools were either 1a, 1b or 1c), the children's skills at school entry, teacher turnover and class size were not systematically related to the differential achievement. Nor were professional attitudinal measures, such as the extent to which the schools' leadership and teachers valued the approach to teaching literacy or their motivation to implement it fully. In six of the seven schools, these measures were very high. In the school in which the attitudinal ratings



were low, the teachers had decided after considerable deliberation to adapt rather than adopt the approach to literacy taught in the professional development because they preferred their own individualised programme. What is more surprising than the lack of a relationship between the attitudinal measures and student achievement was that implementation measures of programme integrity similarly failed to discriminate between the groups of schools. These implementation measures included teachers' self-ratings, interviewer's ratings and observations of programme integrity.

The factors that proved to be more closely associated with the differential achievement in the schools was the emphasis on achievement, the analysis of achievement data and its discussion in meetings and the deprivatisation of practice. In the Group Three schools with high student achievement, the teachers met regularly with their literacy leaders to discuss the data on the achievement of their students in relation to a benchmark of national achievement profiles. They spent their meeting time discussing problems evident in the data for specific children and how their teachers might better be able to assist them. These discussions were typically followed up with classroom observations and support to help them put new strategies into practice. In the interviews, the teachers in these schools reported how this process led them to reflect on the effectiveness of their teaching these underachieving students and how they might need to change it. When asked about the possible negative uses of achievement data, these teachers were less concerned about these possibilities than the teachers who did not discuss the achievement information in this way. The processes in these Group Three schools were closely aligned to those described in the literature on professional learning communities that focus on improving student achievement.

In Chapter Six of the report we comment on the implications of these and other findings for what it means to be professional. All literacy leaders and teachers demonstrated high levels of the qualities of what it means to be professional in traditional conceptualisations of the concept. Except in the school that decided to continue with the previous programme, all were highly committed to implementing the approach to teaching literacy, felt successful and most were satisfied with their students' achievement. The teachers in Group One and Two schools also valued their professional autonomy. What was different in the Group Three schools was the fore-grounding of achievement issues. Both the principals and lead teachers talked about entering the professional development contract because they were concerned about the students' achievement and were impressed by the findings that this approach had been shown to improve achievement in



Decile One schools. Once they decided to adopt the approach, the literacy leaders in the Year One syndicate were given the responsibility for, and requisite class release time, to ensure consistency in programme implementation across all teachers. The teachers were given little choice about implementation, but did not resent this because they could see the achievement gains in the students. The principals in these schools monitored the achievement closely, with the literacy leaders discussing it publicly with the Year One teachers. Problems were defined in terms of the evidence in the data and solutions were sought to rectify them.

In order to establish similar professional learning communities in more schools, we believe that the achievement message needs to be given at different levels of the education system. The recent introduction of the Education Standards Act (2001) now requires New Zealand primary schools to focus on achievement, set standards for that achievement and measure progress towards it. Central to this exercise becoming one of professional learning rather than compliance, is the need for all schools to focus on the teaching / learning / achievement relationship. There is no reason to doubt that New Zealand primary school teachers have focused on the teaching / learning relationship. To make a significant difference to achievement, they need to evaluate whether the learning has been adequate for the children to achieve at the same level as their peers.

In order to maintain this focus and the processes that support it, school leaders need to address attitudinal, interpersonal and skill issues that typically form barriers to professional learning. In the two Group Three schools, high levels of trust had developed that problems evident in the achievement data would lead to support in how to teach more effectively, not blame for failing to do it right. If achievement is used as the touchstone for judging the effectiveness of programmes, rather than particular teaching styles or methods, then teachers are more likely to become data-based inquirers into the impact of their practice on their students.

Additional implications of this study are that traditional measures of effective professional development, sometimes referred to as "happiness quotients" and participatory requirements, are insufficient to improve achievement. All but one of the participating schools valued the approach, were motivated to implement it and all believed themselves to be successful. In New Zealand, participatory rather than achievement requirements have become institutionalised. Performance appraisal requires a professional development component and the professional standards require



participation. Although participation may be desirable in promoting professional learning, it is not sufficient to ensure that the learning impacts on student achievement. If we are to test the relationship between professional development and improved student achievement, larger systems than individual schools need to engage in data-based inquiry because this is a systemic, rather than an individual, school issue.



## **CHAPTER ONE<sup>1</sup>**

### **INTRODUCTION**

This report examines issues related to the sustainability of professional development following the completion of an intensive course in literacy acquisition by teachers of Year One students and their literacy leaders in seven schools. The research on which it is based had two aims. The first was to examine the ways in which the professional development changed teachers' expectations of student achievement over the period of the course. Changing these expectations is central to enhancing student achievement, particularly in schools located in low-income communities (Reyes, Scribner, & Scribner, 1999; Teddlie & Reynolds, 2000).

The second aim was to examine issues of sustainability once the course had finished and the findings are reported here (Part Two). Two issues related to sustainability were examined. These included the trends in student achievement over all participating schools over three years, and the school-based factors that were associated with sustainability, because it is these that exert the major influence on teacher implementation of new practices (Cohen & Ball, 1999; Darling-Hammond, 1997; Goodlad, 1984; Robertson & Allan, 1999). This study involved finding out how seven schools followed up the professional development course over a period of 18 months and the processes that influenced sustainability of gains in student achievement.

### **Background**

The professional development in early literacy teaching was part of the initiative to strengthen education in Mangere and Otara (SEMO) that was launched in these two South Auckland suburbs in 1997. This initiative has been extensively described in Ministry reports (e.g. Annan, 1999) and research evaluations (Robinson et al., 2000; Timperley et al., 1999; Timperley & Lam, 2002) and readers are referred to these reports

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<sup>1</sup> This chapter is co-authored by Irene Fung who assisted with developing the theory and writing much of this review.





for further details. The professional development in early literacy acquisition was part of the “Early Childhood Primary Link” aspect of SEMO and was developed and delivered by Gwenneth Phillips of the Child Literacy Foundation. The theoretical underpinnings of the professional development and the resulting changes in student achievement are reported in Phillips, McNaughton and MacDonald (2001).

The schools that took part in this research all had teachers participating in this professional development during 2000. Some teachers and their literacy leaders from these schools had also participated prior to this time, and at the time of writing this report, others were committed to extending their involvement during 2002.

### **Issues in Professional Development and its Sustainability**

The following review of the literature on professional development and its sustainability formed the theoretical framework for the study. In addition to this general framework, theoretical issues specific to Chapters Three, Four and Five are reviewed at the beginning of these chapters.

Continual updating, deepening and refining of knowledge and skills through professional development is an integral part of any profession. Teaching is no exception. Professional development is viewed as an essential mechanism for teachers to improve their knowledge and expertise, whereby student outcomes such as the intellectual quality of learning and academic achievement will be improved. Without doubt, what teaching professionals know and can do is crucial to what students learn (Darling-Hammond, 1996) and how well they learn (Darling-Hammond, 1997). It is important, therefore, for teachers to continually update and expand their professional knowledge base and to improve or revise their practices so as to meet the learning needs of their increasingly diverse students. This need is most urgent in our Decile One schools where many students have traditionally been academically unsuccessful.

Researchers, educators, and policy makers now share a common view that high student achievement depends on a strong teaching force, which in turn, depends on sustainable and high-quality professional development. The ever-changing knowledge base in our society means that a teaching force that uses yesterday’s professional knowledge to prepare today’s students for tomorrow’s society can no longer be tolerated. Teaching



professionals are expected to continually keep abreast of, and to use, new knowledge and expertise to refine their conceptual knowledge and craft skills (Guskey & Huberman, 1995).

Recognition of the importance of professional development has grown dramatically in the present era of school-based reform, school effectiveness and school improvement movements. Calls for a commitment to teacher learning and improving teacher practice have greatly increased as a result of an emerging understanding from school improvement research that demonstrates a close relationship between professional development and school improvement efforts (Bryk, Rollow, & Pinnell, 1996; Elmore, 1992; Evertson & Murphy, 1992; Fullan, 1993, 1995; Guskey, 1995a; Hodges, 1996; Little, 1993; McLaughlin & Oberman, 1996; Pink & Hyde, 1992). Professional development cannot ensure school improvement, but its omission is likely to ensure its failure.

Another major impetus for the increasing calls for more and different professional development comes from rising expectations for the achievement for all students (Corcoran, 1995b; U.S. Department of Education, 1994). The problem of failing students can no longer be considered as one belonging to individual students and their teachers, but is increasingly recognised to be one for the community and the nation. As an OECD (1998) reports,

In today's world of learning, the stakes are higher than ever before. Young people who succeed in acquiring lifetime learning skills will be the economic and social winners in a newly information-rich society. Those who fail will be excluded from many of its benefits. So the performance of schools and teachers is being watched closely – it has become everybody's business. And the learning undertaken by teachers themselves has become a critical part of the situation, also with high stakes. (p. 53)

A difficulty related to raising achievement in an information-rich society is that the acquisition of basic knowledge is no longer sufficient because students also need advanced thinking and problem-solving skills. Both teachers and students are being asked to master new knowledge and skills – including a deeper understanding of content. Teachers, therefore, need to understand how those students who previously failed learn, and to acquire the pedagogical skills congruent with new approaches to teaching and learning that are associated with student success in higher-level skills (Ingvarson, 1998).



A body of empirical evidence has shown that achieving success for students' learning depends on both the learning of individual school professionals *and* improvements in the capacity of the whole school organisation to solve problems and create new ways of doing things (Sparks & Hirsh, 1997). This means that schools need to attend to developing and sustaining the staff's individual and collective professional learning necessary to promote and enhance student learning by creating professional learning communities (Stoll, 1999). This has particular relevance for countries like New Zealand with deregulating and decentralising educational policies. This collective learning focus does not mean that external pressure and support are unimportant, but that "certified courses, inspirational speeches and isolated workshops are normally much less effective than professional learning that is at some point built into teachers' everyday working responsibilities" (Hargreaves, 1997).

External professional development programmes that operate on a "delivery model" (Bradley, Conner, & Southworth, 1994; Goleman, 1998), with the underlying assumption that teachers need updating rather than needing opportunities for serious and sustained learning of curriculum, students, and teaching (Ball & Cohen, 1999) do not meet these conditions. These programmes are rarely truly developmental, or have focus, intensity, follow-up, and coherence with individual or school goals needed for improved student performance. As a result, they frequently fail to achieve the simultaneous improvement of individual and collective capacities within schools (Corcoran, 1995a). School-based professional development, implemented in the fashion of building professional learning communities within schools, is more likely to facilitate the learning needed to address challenges unique to the students' learning needs and to close the gap between current practices and the practices needed to achieve the desired outcomes (DuFour & Eaker, 1999; Lewis, 1997; Louis & Leithwood, 1998; N.Z. Ministry of Education, 2001; Wald & Castleberry, 2000). *"Changes in schools may be initiated from without, but the most important and lasting change will come from within"* (Barth, 1990, p. 159). Schools' capacities for professional growth reside in large part in their ability to work from within as they create their own innovative solutions in order to achieve their educational goals. As Fullan argues (1998, p. 6), *"there is no external answer that will substitute for the complex work of changing one's own situation"* (p. 6). Simply put, the basic professional development question confronting school leaders is how to increase and sustain the internal capacities for individuals and groups within their schools to effectively bring about change and solve their own problems.



While the focus of this report, and much of the literature, is on professional development and learning, it is important to remember that the ultimate goal is to link professional learning to improved teaching and learning. As Camburn (1997) reminds us: “While creating learning communities for teachers may be a worthwhile development for many schools, our public school system is ultimately in the business of educating students not teachers.” (p. 60) The creation of environments that are conducive to teacher learning, therefore, should be tested against the standard of improved student achievement.

### **Forms of Professional Development**

Professional development is delivered in many different forms that are underpinned by different assumptions about teacher learning. One form based on traditional concepts of professional development focuses on learning content knowledge with an underlying assumption that teachers are knowledge recipients. Professional development programmes are judged to be effective, therefore, if they provide professional learning coherent with student learning, focus on clear learning goals, emphasise active content knowledge learning, and are sustained over a period of time (e.g. Franke, Carpenter, Fennema, Ansell, & Behrend, 1998; Garet et al., 1999; Sparks & Hirsh, 2000).

A different approach is to assume that teaching professionals need to have a far more active role than simply being knowledge recipients. In this view, each teacher is expected to be “a scholar, an intellectual, and a knowledge worker oriented toward the interpretation, communication, and construction of such knowledge in the interests of student learning (Shulman, 1999, p. xiii). Lieberman and Miller (2000) describe the new professional teachers as “researchers, meaning-makers, scholars, and inventors, they establish a firm professional identity as they model the lifelong learning they hope to infuse in their students” (p. 52). Hence professional development programmes are effective if they enhance teaching professionals’ capacities to participate in their professional community discourse so that they are able to co-construct and co-evaluate new professional knowledge of best practices based on high professional standards (e.g. Ball & Cohen, 1999; Burroughs et al., 2000; Cochran-Smith & Lytle, 1999; Putnam & Borko, 2000). The criteria for this type of professional development include:



1. whether teachers are able to generate, and critically evaluate, their knowledge of practice by participating in systemic critical inquiry into teaching practices within their professional communities;
2. whether teachers are able to use the new knowledge to solve teaching and learning problems within their school context.

A third view regards all professional development efforts as inadequate if they cannot bring about teachers' conceptual changes in their thinking about knowledge, teaching and learning. Thompson and Zeuli (1999) point out that the fundamental weakness of many professional development efforts (which are apparently aligned, coherent, and sustained) is that they rarely stray from the conventional modes of thinking, thus viewing "knowledge as facts and skills, teaching as telling, and learning as remembering",

At the heart of this view, the most ideal form of professional development is one that challenges and changes the teaching professionals' deeply held beliefs, knowledge, and habits of practice. Thompson and Zeuli (1999, pp. 355–357) describe five characteristics for this type of professional development as follows:

- a. It creates a sufficiently high level of cognitive dissonance to disturb the equilibrium between teachers' existing beliefs and practices on the one hand and their experience with subject matter, students' learning, and teaching on the other.
- b. It provides time, contexts, and support for teachers to think – to work at resolving the dissonance through discussion, reading, writing, and other activities.
- c. It ensures that the dissonance-creating and dissonance-resolving activities are connected to the teachers' own students and contexts, or something like them.
- d. It provides a way for teachers to develop a repertoire for practice which is consistent with the new understanding that teachers are building.
- e. It provides continuing help in a cycle of surfacing new issues and problems, deriving new understanding from them, translating these new understandings into performance, which, in turn, raises new problems.



An example of the need for this type of learning in low-income communities relates to changing teacher expectations of student achievement. These expectations have been shown to be related to teachers' goals for students, the effort they invest in teaching, their behaviour in the classroom and student achievement outcomes (Tschannen-Moran & Hoy, 2001). Entrenched low expectations in these communities provide significant barriers to shifting student achievement. If teacher expectations of student achievement are not addressed through challenging existing assumptions about student learning potential, efforts to help teachers make their teaching more relevant for these students are likely to fail. For example, McLaughlin & Talbert (1993) studied a large-scale professional development initiative in the United States that attempted to introduce teaching pedagogies that created a better fit of instructional practice to students' learning needs. Many teachers continued to teach as they always had and blamed the students for not learning. Their deeply held beliefs, knowledge and habits of practice had not been challenged by the experience.

This awareness that more than knowledge needs to change through professional development has led to a focus on the context and situation in which the professional learning might best occur. A course, removed from the school environment, may challenge teachers' thinking. If this challenge is to result in sustained changes in teaching and learning, the professional development needs to be either situated in the school or to have off-site material followed up in this environment because the norms, culture and climate have a compelling influence on how teaching and learning take place (Barth, 1990; Fullan & Hargreaves, 1992; Murphy, 1991).

A school's cultural environment, however, may debilitate rather than facilitate individual and collective professional learning if it is characterised by any one of the conditions identified by Goodlad (1984):

- a. Teachers are isolated because they perform their craft behind closed doors and have little time within rigid daily schedules to meet, plan, observe, and talk with each other;
- b. Teachers lack a sense of power and efficacy, feel they are at the bottom of the hierarchy while the decisions and evaluations affecting them are being made "up there" someplace;
- c. Information about student achievement is seen to be for political, evaluative, or coercive purposes and it neither involves nor instructs the school staff



members in reflecting on, evaluating, and improving curriculum and instruction;

- d. Educational innovations are viewed as mere “tinkering” with the instructional programmes because there are so many of them, and their impact is so limited.

Instead of institutionalising change, these types of traditional practices and policies are usually so deeply entrenched that the status quo is maintained despite the best efforts of external professional developers. On the other hand, the individual and collective learning capacity of a school is likely to be enhanced if the cultural norms of a school emphasise collegial relationships among teachers in their professional community, wherein teachers pursue clear, shared purposes for student learning, engage in collaborative activities to achieve their purposes, and take collective responsibility for student learning (Cohen & Ball, 1999; Darling-Hammond, 1997; Hodges, 1996; Hord, 1997; Kruse et al., 1995; Leithwood et al., 1995; Robertson & Allan, 1999). In these terms, programmes are considered effective if they generate, energise and sustain norms and values within a school culture and create an environment that fosters mutual cooperation, emotional support, personal growth and a synergy of all professional development efforts (DuFour & Eaker, 1999; Facione & et al., 1996).

Despite the importance of this latter set of conditions within schools, conventional professional development programmes seldom make provision for follow-up or long-term feedback, or have direct relevance to teaching and learning in specific school settings (King & Newmann, 2000). They are often fragmented, brief rather than sustained, and not aligned with well-specified curricular and instructional standards. Individual professional learning through random conferences and workshops based on personal interests do not enhance organisational development and may contribute little to a school’s sustainable ability to solve its problems (DuFour, 2001). Simply put, a school cannot rely solely on external sources of professional development to advance its school goals and enhance student learning, because they offer little help to the simultaneous improvement of individual and collective capacities, or to the sustainability of professional development efforts.

Teacher success in boosting student achievement depends on their ability to implement new knowledge and skills within a particular context, but this ability is subject to the



influence of a range of contextual conditions unique to every school (King & Newmann, 2000). Each school contains a diverse mix of teachers and students with varying competencies and attitudes and a unique set of social, cultural and political conditions, and hence of individual and collective capacities for advancing a unique set of school goals. Indeed, many studies have shown how specific school contexts may influence teaching and learning (Bryk, Sebring, Kerbow, Rollow, & Easton, 1998; Fine, 1994; Lytle & Cochran-Smith, 1994). These contextual differences explain why many teachers experience difficulty in transferring their learning from conventional professional development programmes to their own classroom practices, and why the primary arena for professional development research has moved from workshops to the workplace (Clement & Vandenberghe, 2000; DuFour, 1999; Hord, 1997; Lashway, 1998; Leo & D'Ette, 2000; Leonard & Leonard, 1999; Louis & Leithwood, 1998; McLaughlin, 1993; Rosenholtz, 1989; Smylie, 1995).

### **School-based Conditions that Foster Sustainability**

From the literature on the school-based conditions that foster sustainable professional development, we have identified three interconnected strategies that appear to form the basis of a strong school-based professional learning community. We will briefly discuss each of these strategies below because we have based our methodology for this report on them. The strategies include:

1. accentuating the goal of promoting student learning and achievement;
2. using a combination of structural-function and cultural-individual approaches;
3. building professional capacities and strengthening efficacy among staff.

In presenting these strategies, we do not presume to provide school professionals with an easy answer. Instead we try to draw on and pull together what the literature has said about how strong school-based professional communities can be structured as sites for sustainable professional learning that can develop both individual and collective professional capacities to realise schools' goals.





### **Accentuating the Goal of Promoting Student Learning and Achievement**

There is a danger in developing a professional community in which staff relations and professional development become ends in themselves rather than the means for serving the interests of students in the school. To build a strong school-based professional learning community, it is important to tie all professional development to the larger purpose of education for the students and the specific student learning outcomes that the school desires to achieve. The first reason for doing so is that the school's expectations and hopes provide the motivating force (Csikszentmihalyi, 1990), which, in turn, energises and focuses the actions of those involved. Another reason is that the effectiveness of a professional learning community should be evaluated by the community's effectiveness in accomplishing what the school desires to achieve. Without clear, common goals, teachers are not able to communicate meaningfully and precisely about how to improve, and about how to determine if they are improving (Schmoker, 1999). Clear goals promote rational planning and action, and clear criteria by which performance can be evaluated (Rosenholtz, 1991). The lack of clear goals may provide the most credible explanation for why the results of more than 15 years of educational reform have been so disappointing (Astuto et al., 1994; Darling-Hammond, 1998; U.S. Department of Education, 1998).

In other words, schools should make data-based decisions about their intermediate and short-term school goals, foster results-oriented actions and reflection, and shared responsibility for the results they want, so as to address challenges unique to their students' needs and performance. Schmoker (1999) argues that the accomplishment of long-term goals depends on how schools effectively select, define and monitor the accomplishment of short-term, measurable and challenging but doable sub-goals. When these sub-goals are carefully and clearly defined, they guide staff decisions about what should be emphasised instructionally, and how they should gauge their performance success (Rosenholtz, 1991). They also lead staff to achieve effectiveness, cohesion and collegiality in their collective improvement efforts.

After all, the purpose of building a strong professional community is to enable staff to prepare all students to master a challenging curriculum and to achieve at high levels. In determining school goals, whether long term or short term, each staff member must be committed to the idea that all students are capable of being successful in their classroom, and willing to monitor progress towards that goal.



## **Using a Combination of Structural and Cultural Approaches**

New educational goals cannot be accomplished without the support of the school's structural and cultural environment. For some schools at least, this may mean significant change. In the school reform literature there are two different approaches to bringing about changes in schools: a structural or cultural approach (van den Berg, Vandenberghe, & Sleegers, 1999). The two approaches differ in patterns of perception, thinking, evaluation and problem solving. The structural approach views development as a strategy in which schools operate rationally, forcefully and in a goal-directed manner. Systematic methods, top-down coordination, and steering are the key components in this approach. The role of the principal is essentially to manage change. Such planned or managed change is often criticised for its confidence in a linear improvement process and their "manageability", which is predominantly unpredictable, evolutionary in nature and difficult (Louis, 1994, p. 4). As Peterson, McCarthy and Elmore (1996) found, restructuring by itself does not change student learning or teacher practice, even though, as Elmore (1995) has pointed out, "Most school reformers and practitioners take for granted that changes in structure produce change in teaching practice, which in turn produce changes in student learning." (p. 23)

The cultural approach, on the other hand, involves more organic forms of cooperation and the active involvement of teachers during the process of professional development and change. It emphasises the importance of considering the potentials and possibilities of individual teachers for the actual realisation of change and assumes that to achieve significant change staff need to learn interactively and experimentally. Differently put, the school leader in the cultural-individual approach is more concerned with the stimulation of interaction and the dynamics of the innovation process than with steering and top-down management.

Cultures, however, do not exist in a vacuum, but are grounded in structures of time and space. These structures shape relationships. If the timetable does not allow teachers to meet, they may become worn down and captives of their schedule – "prisoners of time" (National Education Commission on Time and Learning, 1994). Under these circumstances, collaboration becomes exhausting and contrived – tagged on rather than integral to ordinary commitments and working relationships. According to Stoll & Fink (1996), successful schools were able to link their re-structuring and re-culturing efforts so as to bring about changes effectively. For example, they adapted timetables, created new policies, amended roles and responsibilities, developed clear lines of authority and



responsibility, provided time for people to meet; hired new staff to ‘fit’ and help steer the changing direction of the school; and facilitated coordination of the process (Stoll & Fink, 1996).

### **Building Individual and Collective Professional Capacities**

A strong professional learning community requires staff commitment to both their own individual learning and to assisting the school as a whole to become a high-performing organisation by improving professional capacities necessary for preparing students to achieve at high levels. Specifically, the existing individual and collective professional capacities within schools must not only be worked to their limit, they must be expanded in the service of delivering quality education to students.

What capacities to build and for what purposes are two important notions to clarify. According to the *Oxford English Dictionary* (second edition 1989), *capacity* is referred to as a person’s mental or intellectual receiving power, or mental ability to produce, experience, understand and learn something; and *competency* is referred to as possessing sufficient requisite capacity and qualifications. Newmann, King, & Youngs (2000) define *capacity* as the potential of an entity, for example, material, a product, person, or group, to fulfil an intended function or role. The implication of this definition is that without clarifying the role teachers and schools play in education, the search for what capacities for them to build will become futile. Teaching and schooling at its core is a moral enterprise (Fenstermacher, 1990; Schoenfeld, 1999; Sockett, 1993) because it contributes to the creation and re-creation of future generations (Durkheim, 1961) and it is about making a difference in the lives of students – all students regardless of class, gender and ethnicity (Fullan, 1993).

Teaching professional capacity is the extent to which teachers or schools are able to learn, and to develop new knowledge and skills so that their service and practice will be kept current, be of high quality and effectiveness, and fulfil the moral teaching role to serve the interests of its students and help them to achieve at their highest levels. Hence, the purpose of teaching professionals’ capacity building is to enable teachers and schools to provide quality education to children. It follows that to build capacity at the individual level, first, teachers need to develop a repertoire of effective methods for promoting student learning. Second, they need to learn about their students and their progress so that they are able to appropriately select from, and adapt, the methods within their repertoire



that best provide for particular pupils' needs in particular circumstances. Third, teachers need to refine the decision-making process within this repertoire through experimentation, evaluation, revision or modification. Fourth, teachers need to learn in a principled way by reflecting on their experience and evaluating the effects of their decisions and actions on student learning outcomes. Finally, teachers need to bring under critical scrutiny their intuitive information gathering and interpretation, unexamined assumptions, and routinised actions and make modifications accordingly.

If the school as a collective is to benefit from this individual learning, teachers need to share their individual knowledge, skills and dispositions in ways that integrate them with the learning of others (Newmann et al., 2000). The collective skills of the full staff to improve student achievement school-wide is what Newmann and his colleagues refer to as *school capacity*, which they argue should be seen as an organised, collective enterprise of putting to use individual teaching professional's expertise so as to fulfil the school's role to deliver effective and quality education to the children (Newmann et al., 2000).

There appears to be a strong relationship between school capacity and school's internal accountability systems (Newmann, King, & Rigdon, 1997). In a recent study by Newmann and his colleagues, school capacity was measured in terms of three dimensions: teacher knowledge and skill, school autonomy to act, and shared commitment and collaboration toward a clear purpose for student learning. They found schools with strong school capacity also had strong internal accountability systems. These schools were able to identify clear standards for student performance, collect and review information to inform themselves about their levels of success, and exert strong peer pressure within the faculty to meet the goals. Further, they found that these internally generated accountability systems constituted a major source of cohesion within the school. These schools had strong, clear consensus on the school's mission and professional development focus, were committed to monitoring and regulating their students' progress, and offered their own set of rewards and sanctions to reinforce the moral values and commitments they shared.



## Professional Inquiry and Reflection

Fundamental to sustainable professional development is the adoption of an inquiry stance by all the professionals involved in the school, both separately and together, about what they are doing, why they are doing it and how effectively they are accomplishing it. Cochran-Smith and Lytle (1999) argue that an inquiry stance means that teacher learning needs to be understood as a long-term collective project of school professionals who are committed to improving the quality of teaching and student learning. The notion of collective inquiry, however, leads inevitably to difficulties related to negotiating the agenda, sharing power and decision making, representing the work of the group, and dealing with the inevitable tensions of individual and collective purposes and viewpoints. In taking an inquiry stance, teachers challenge the purpose and underlying assumptions of educational change efforts rather than simply implementing them. From this perspective, inquiry communities exist to make consequential changes in the lives of teachers and students, and in the social and intellectual climate of schools and schooling. Through collaborative and evaluative inquiries, teachers make their tacit knowledge more visible, call into question assumptions about common practices, and generate data that make possible the consideration of alternatives.

Dewey recognised a hundred years ago that reflection can take place only when there is a real problem to be solved (Dewey, 1903/1976). More recently, researchers have agreed that to promote the kind of teacher learning that leads to improvements in teaching, professional development should concentrate on instruction and student outcomes in teachers' own schools; provide opportunities for collegial inquiry, help and feedback; and connect teachers to external expertise while also respecting their discretion and creativity. These experiences should be sustained and continuous, rather than short-term and episodic (Corcoran, 1995a; Darling-Hammond & McLaughlin, 1996; Hargreaves, 1995; Lieberman, 1995; Little, 1993; Lytle & Cochran-Smith, 1994; Renyi, 1996; Richardson, 1994). Therefore, for professional learning through inquiry to be effective, the aim of the inquiry has to be focused on the problems the staff have identified, evaluating the effectiveness of the ways that the staff are dealing with the problems against the desired outcomes, and exploring promising changes and testing them as hypotheses, with commitment to action following a study of the results. Glickman (1993) considers that, "It is irresponsible for a school to mobilize, initiate, and act without any conscious way of determining whether such expenditure of time and energy is having a desirable effect"



(pp. 54–55). To achieve this process, evaluative inquiry must be seen as normal and the conditions of the workplace supportive of continuous, collegial inquiry (Joyce & Calhoun, 1995). Professional development plans become hypotheses to be tested for their effectiveness, rather than as panaceas to be adopted.

## **The Current Study**

The current study examines issues in the sustainability of a professional development course in early literacy. It focuses on the school-based factors that influenced the sustainability of the professional development and student achievement following a course in early literacy teaching. The theoretical basis of this study was based on the above review of the issues in sustainable professional development and the literature reviewed at the beginning of Chapters Three, Four and Five.

A recent report by the course developer and deliverer (Phillips et al., 2001) outlined the theoretical basis of the professional development itself and the significant improvements in student achievement over a range of literacy measures that occurred for a random selection of Year One students. The major parameters of the professional development are described below. This description is based on the Phillips et al. (2001) report, the first author's observations of two professional development sessions and interviews of the participating teachers.

The course catered for teachers of Year Zero / One students and their literacy leaders in Decile One schools in Mangere and Otara. It was intensive and ongoing in that involved 10 half-day sessions over two school terms. Most of the teacher-release funding was provided by Ministry of Education as part of the SEMO initiative. The professional development was driven by research indicating that the approach to teaching literacy had demonstrated improved student achievement in the early years of children's literacy acquisition in low-decile schools. Throughout the course, teachers were encouraged to examine their own assumptions and practices related to teaching literacy and to experiment with new practices with the aim of improving achievement. Much of the time in the professional development sessions was spent discussing and addressing teacher concerns about literacy, how to teach it and alternative practices. Teacher beliefs about literacy acquisition were a particular target of the professional development and challenges to theoretical understandings were constant.



As Phillips et al. (2001) explain,

The goal of the developer was to draw the objects (new or refined structures for teaching) into the teacher's existing classroom practices through a process of highlighting those current practices, including goals and behaviours.... These were then questioned with reference to outcomes for children, to research findings and to teachers' changing views of language and literacy as dialogue. Finally, alternative or refocused practices were explored and implemented in the classroom between sessions. This process recycled across every session developing what might be described a spiral curriculum.... Learning implies change and teachers were challenged to change their belief systems. This was made explicit to the teachers at the very first session after the teachers reflected on their own school's [achievement] data. (pp. 98–99)

Although the professional development was externally initiated, the extended timeframe over which it took place and the involvement of all teachers of Year One students and their literacy leaders provided many opportunities for in-school learning processes to occur during the professional development itself. Given the significant commitment of staff time and effort to the course, it could be expected that the teachers and their literacy leaders would consider it a major school initiative and provide follow-up for the teachers after the course finished. It was these follow-up processes that we studied in this research.

## **Organisation of the Report**

The following chapters report on the two measures of sustainability. 'These measures include the student achievement gains for all schools after the course had finished and the in-school factors that were associated with differential student achievement in the schools. In Chapter Two we outline the methodology used in the two studies and describe how the achievement gains were measured. Chapter Three presents the findings on student achievement, showing that the gains in student achievement over all the schools continued but the patterns in the seven schools were very different. In this chapter, we discuss the relationship between these differential levels of achievement and the teachers' motivation to implement the approach to teaching literacy. Chapter Four examines the different professional learning communities established in each school and how the



teacher discussions related to student achievement. In Chapter Five, we examine the implications of Chapter Four and other data on principals', literacy leaders' and teachers' feelings of success and satisfaction with achievement for what it means to be professional. Chapter Six presents the conclusions to the report.





## CHAPTER TWO

### METHOD

This study sought to answer two research questions. The first question asked, “Were the achievement gains reported by Phillips et al. (2001) sustained for the 18 months following completion of the professional development for the schools as a group?” The second asked, “What school-based processes were associated with the sustainability of professional development?” To answer this second question, we first needed to define what was meant by sustainability. Sustainability could refer to programme integrity or to student achievement. Given the theory of effective professional development outlined in Chapter One, a slavish commitment to implementing any approach to teaching literacy regardless of achievement was precluded. So our main measure of sustainability related to the sustainability of improvements in student achievement.

The school-based processes in which we were interested were also based on our theory of effective professional development, and focused particularly on the following:

- A range of attitudinal measures typically associated with successful implementation, e.g. valuing of the approach to teaching literacy, motivation to implement it;
- The extent to which the approach to teaching literacy was implemented in the classrooms;
- Opportunities for those involved to participate in meetings about teaching literacy with their colleagues and the processes that took place during those meetings;
- The opportunities and processes used for classroom observations;
- The teachers’ perceptions of success in implementing the programme and their satisfaction with classroom achievement.

This school-based focus meant that the unit of analysis was the group of teachers and their literacy leaders who had undertaken the professional development and were teaching Year Zero and / or Year One students. This unit is unusual in that most research typically employs the whole school or the individual teacher as the unit of analysis, depending on whether the research is of effective schools or effective teachers. We were not looking for isolated teachers undertaking brilliant programmes, or the reverse, but rather a professional community in which all teachers were involved in learning how to teach literacy more effectively.



## **Participants in the Research**

Seven schools (A–G) agreed to participate in this phase of the research. Principals and the literacy leaders were approached initially and those who agreed to take part nominated three teachers to be interviewed who represented a range of skills and views. In Schools C–E only three teachers taught at this level so all were included. Teachers were approached for their consent individually and all agreed to participate.

## **Data-collection Methods**

Table 2.1 summarises the two phases of data collection for this study. Phase One occurred within three to six months of the completion of the professional development with Phase Two occurring approximately one year later. In both phases, data-collection methods included interviews, meeting observations, implementation ratings and feedback of individual school reports. In Phase Two, teaching observations were also undertaken.



**Table 2.1 Data-collection Methods**

Schools	Phase 1				Phase 2				
	Interview	Report & feedback	Implementation ratings	Meetings observed	Interview	Report & feedback	Implementation ratings	Teaching observed	Meetings observed
A	1 Principal, 1 L. leader, 3 Teachers	Principal, L. leader, Teachers	Interviewer, Teachers	1	1 Principal, 2 Teachers	Principal, L. leader, Teachers	Principal, L. leader, Interviewer	9	–
B	1 Principal, 1 L. leader, 3 Teachers	Principal, L. leader, Teachers	Interviewer, Teachers	1	1 Principal, 1 L. leader, 2 Teachers	Principal, L. leader, Teachers	Principal, L. leader, Interviewer	10	1
C	1 Principal, 1 L. leader, 3 Teachers	Principal, L. leader, Teachers	Interviewer, Teachers	2	1 Principal, 1 L. leader, 3 Teachers	Principal, L. leader, Teachers	Principal, L. leader, Interviewer	6	–
D	1 L. leader, 4 Teachers	Principal, L. leader, Teachers	Interviewer, Teachers	–	1 Principal, 1 L. leader, 3 Teachers	Principal, L. leader, Teachers	Principal, L. leader, Interviewer	–	1
E	1 Principal, 1 L. leader, 4 Teachers	Principal, L. leader, Teachers	Interviewer, Teachers	1	1 Principal, 1 L. leader, 3 Teachers	Principal, L. leader, Teachers	Principal, L. leader, Interviewer	8	1
F	1 L. leader, 3 Teachers	Principal, L. leader, Teachers	Interviewer, Teachers	1	1 Principal, 1 L. leader, 2 Teachers	Principal, L. leader, Teachers	Principal, L. leader, Interviewer	11	1
G	1 Principal, 1 L. leader, 3 Teachers	Principal, L. leader, Teachers	Interviewer, Teachers	1	1 Principal, 1 L. leader, 3 Teachers	Principal, L. leader, Teachers	Principal, L. leader, Interviewer	9	1



## Interviews

The two phases of interviewing over the 18-month period inevitably led to changes in those available for interview due to resignations or internal school re-organisation. In only three schools (B, D and E) were the original staff still teaching Year Zero / One children in both phases. In school A, high teacher turnover meant only one of the original teachers was available and only one substitute was made. The literacy leader also left the school so the principal took over this role. She was interviewed as both the principal and literacy leader in Phase Two. In Schools F and G, two of the original teachers left and two substitutions were made. In School C, a teacher teaching Year One children was shifted to Year Two and a relieving teacher employed to teach in Year One. The Year Two teacher was interviewed but felt unable to make informed comment so her responses were not included in the analysis. All the principals remained in their positions throughout the project except in School G where the principal changed in Year Three. A profile of the teachers' years of experience, country of training and reading recovery training is portrayed in Table 2.2.

**Table 2.2**

### Profile of Participating Teachers

Profile	Phase One (n=23)	Phase Two (n=18)
Year of experience		
Less than 1	2	1
1–2 years	2	5
3–5 years	3	2
6–10 years	5	3
10 years +	8	7
Unspecified	0	1
Country trained		
New Zealand	18	17
Overseas	5	1
Reading recovery training		
Yes	6	5
No	17	14



All interviews were conducted by one of the two authors. The second author was selected for this role because of her in-depth knowledge of the approach to teaching literacy and was recommended by the professional development trainer. The first round of interviews took place within three months of the course finishing and involved the literacy leader and three teachers in each school. The interviews were semi-structured with lead questions asked of all interviewees followed by probe questions when clarification or elaboration of the answer was needed. The specific questions are detailed in the chapters in which the results are reported. In summary, the questions asked about motivational factors likely to impinge on implementation and the in-school processes associated with sustainability, such as classroom observations and collegial meetings.

The extent of implementation was derived from the teacher's self-ratings, the literacy leaders' ratings and the descriptions of their literacy programmes in response to the interviewers' questions. The criteria used by the interviewer to judge the extent to which each of the three components of the approach to literacy was implemented follow:

#### *Reading To*

- Books selected ranged from simple to sophisticated
- Two to three books were read per session
- Delivery was undertaken in a narrative style
- Opportunities were provided for children to interact with the teacher about the story
- Texts were related to other texts with similar themes
- Sessions occurred three times per week.

#### *Instructional Reading*

- Texts selected according to vocabulary pathways
- Group size was typically three to four children
- Book oriented by talking about possible information the child needed to be successful
- In orienting conversations, language structures used the same tense as the text and provided unfamiliar vocabulary
- When the children read, the teacher focused them on the text and used consistent instructional language
- From the outset, the children were taught how to find their errors
- At higher levels, the teacher assisted the children to fix errors, e.g. by generating alternatives, giving possibilities
- At beginning levels, word work following text reading used known words
- Early word work activities transposed letters to make new words



### *Writing*

- Used direct experience as the basis for writing
- Group size was no larger than three children
- Language used in reading was related to and used in writing
- Teacher listened to and interacted with the child
- In the early stages, an aspect of the dialogue was used for the written text
- More independent children initiated writing and teacher monitored known practices
- Children were taught use of alphabet / word cards for independence.

### **Meeting Observations**

In each school, we asked to observe and tape record two meetings when teachers either discussed the approach to literacy taught in the professional development or the literacy achievement of the Year One students. Two schools (A and D) held only one meeting that met these criteria so only one meeting is included in the analysis. All meetings were tape recorded, transcribed and coded. The coding schedule is detailed in Appendix Two, with the results reported in Chapter Four.

### **Classroom Observations**

In each school, two observations of each of the three components of the approach to teaching literacy were made of three teachers. All observations were undertaken by the second author. The observations varied in length from 15 to 30 minutes because the observer watched implementation of a complete component of the literacy teaching approach which inevitably varied from teacher to teacher. The same criteria used to judge the extent of implementation are listed in the interview section above. A rating of 1–5 was given for each of the three components.

### **Feedback and Accuracy Checks**

At the end of each phase, each school was sent an individual school report that summarised the main themes for the school and included illustrative quotes from the interviewees after each round of interviews. These reports were sent to the literacy leader to be discussed with the staff. In all schools, a follow-up interview took place with all the teachers from Year One and the literacy leader to check the accuracy of the information. Where changes were requested, these were made, and with the consent of the staff the principal was given a copy of the report and subsequently interviewed. In addition, this



final report has been circulated to the professional development contractor and each school and any outstanding issues discussed with them, and inaccuracies amended before public release. These feedback sessions were invaluable for helping the researchers to understand the reasons for particular processes occurring in each school.

### **Achievement Data**

It is well established that attributing changes in achievement to particular professional development is a vexed process and presents one of the greatest challenges to ascertaining the worth of participation in professional development. Typically, these studies have been directly associated with the professional development itself, rather than how well it is sustained over time, even though it is well recognised that the relationship between effectiveness and improved student learning depends on both the quality of the professional development and in-school factors, such as administrator knowledge, practices and policies (Guskey, 1999).

The recently released report by Phillips et al. (2001), referred to in Chapter One, is one such study that showed substantial effects on student achievement over a series of literacy measures at 5:6 and 6:0 years. The current study follows seven of the schools involved in this initiative over the following 18 months.

In the current study, we selected two of the measures used by Phillips et al. (2001) that were at greatest risk of not being achieved by Decile One children. These were text reading (Clay, 1993a) and word recognition using the BURT word list (Gilmore, & Reid, 1981). A third measure, reported in Phillips et al. (2001), also showed evidence of high risk of failure for children in Decile One schools but was not included in this study because schools had participated differentially in the writing component of the professional development for reasons that will be explained below. All teachers participated in the reading component.

**Risk Ratio.** The measures were selected because of their high risk ratio for children in Decile One schools. A risk ratio determines the extent to which a given population is likely to succeed or fail on a particular measure. Phillips et al. (2001) explain the significance of the risk ratio used to select the measures they used.

A risk ratio represents the relative increase or decrease in the probability of a given outcome when one rather than another condition obtains. In this case, the



given outcome is expected progress in a range of literacy measures as determined by the stanines available from the Observation Survey, or by expectations for text levels set by national practice (McNaughton, Phillips, & MacDondald, 2000) or by the expected 6 year old level for the BURT. The outcome was set at being at or above the stanine level of 4. Seventy-seven percent of the distribution would be expected to be at or above stanine 4.

The condition is attending Decile One schools and the referent group is attending any school. The probability of a literacy outcome at or above the normally expected middle stanine range is 0.77. The probability of a given outcome in the Decile One schools is calculated first by summing the total number of children at or above stanine 4 divided by the total number of 6 year old children in the study. The expected probability of 0.77 is then divided by the obtained probability.

The resulting ratio provided an estimate of the risk associated with literacy instruction in the Decile One schools. A ratio of 1 indicates no risk, a ratio greater than one indicates increased risk and a ratio lower than 1 indicates reduced risk compared with the referent group. (pp. 35–36)

At baseline, in the Phillips et al. (2001) study, only 24% of children scored at or above Stanine 4 in text reading and 17% in BURT, rather than the expected 77%.

There were other reasons for selecting these two measures. One is that they have long-term associations with achievement in school reading. BURT scores at six years were significantly related to reading comprehension at eight years ( $r = 0.70$  (Tunmer, Chapman, Ryan, & Prochnow, 1998);  $r = 0.78$  (Wylie, Thompson, & Lythe, 1999)). Text level has high significant correlations with both reading comprehension ( $r = 0.66$  (Tunmer et al., 1998) and word knowledge ( $r = 0.83$ , (Clay, 1993a)).

A second reason was that the measures selected assessed both item knowledge and continuous text reading. Items smaller than a word, such as a letter, were not selected because Phillips et al. (2001) reported that the children's knowledge of letters and their ability to hear and record sounds in words (their phonological knowledge) were at





expected levels, that is, within or close to the distribution of progress typical of children in the first years of school in New Zealand. Children's knowledge of book concepts was also relatively close to expected levels of achievement at six years, suggesting that the school programmes were already effective in these areas.

The third reason for selecting these measures was that the main focus of discussions within the schools we studied was on text reading, rather than other knowledge items. In all but two of the meetings observed, text reading was the exclusive focus. In the other two meetings, writing vocabulary was the focus. In one school this arose because most teachers had not attended the professional development in writing and, in the other, the staff decided to have a special focus on writing for a short period of time.

Text levels chart a child's progress through a gradient of difficulty based on the core series of instructional books used in New Zealand classes. As Phillips et al. (2001) explained,

These texts have been written with vocabulary, sentence structures, stories and images that are representative of the life and language of children in New Zealand. They are levelled through a process of field testing by practitioners, and guidelines for writers, yielding a graded sequence which is colour coded and to which practitioners, educators and researchers have assigned ascending numbers and equivalent reading ages. Specific levels have been published in the national Reading Recovery book list (Reading Recovery, 1993). The level assigned to a child is determined by a titration procedure in which the child reads successively more difficult familiar texts until accuracy drops below 90% words correct. The consecutive level preceding the drop below 90% of words correct becomes the instructional level.... The text levels have been established in five large-scale samples involving about 2500 children over 20 years. (p. 36)

The BURT reading test (Gilmore et al., 1981) provided an assessment of generalised word recognition, with words not limited to the core reading texts. The BURT has been normed for New Zealand children and its standardised feature becomes relevant at the age of six.



As in the Phillips et al. (2001) study both measures were collected by the school as part of their usual practice of carrying out the Observation Survey at the end of the first year of instruction (Clay, 1993a). Evidence of this assessment being “usual” was gathered when schools were, in 2001, asked for copies of data from 1998 for this study. All schools were able to provide detailed records. Most records were hand-written in an exercise book with individual children’s names, dates of birth, dates of testing and test results. In two schools, more recent results were entered on the computer.

Despite the completeness of these records, only two schools collated or aggregated these data. School F had composed box and whisker graphs of text levels for each year since 1998 to determine if the average text level was rising, and School D analysed the 2000 data according to the number of children in each stanine for the first time in 2001. Apart from this very “low-stakes” aggregation process, the scores were typically used only to identify children in need of special assistance through the school’s reading recovery programme or to give suggestions to the classroom teacher on possible teaching strategies. In no school were these suggestions systematically followed up to ensure the advice was followed.

In all schools the literacy leader or another senior staff member with this specific responsibility administered the running records. They had all attended in-service courses with respect to administering these particular measures. Text levels were established by taking running records of progressively more difficult or easier texts in order to find the highest level a child can read at 90% accuracy. As reported in Phillips et al. (2001) it is a commonly used measure with no evidence of systematic bias in any of the reported studies. Phillips et al. assessed the reliability of teachers’ scores by a trained researcher on 10% of the children in their study (which included children in this study). Pearson product-moment correlations between measures were BURT,  $r = 0.95$  and text,  $r = 0.75$ . Each of these was significant at  $p < 0.001$  (p. 35).

**Combining Scores.** We wished to create a combined reading score from the text level and BURT scores to determine a particular school’s reading profile so that the children’s achievement in the schools could be compared. A single score would enable us to undertake multi-variate statistics to determine differences and similarities in the profiles of achievement in the different schools.



Combining these two measures, however, provided another challenge because the two scores used different scales. BURT used a series of age-equivalent bands for a particular number of words read correctly, while text level is scored at a particular Reading Recovery level (Clay, 1993b), so we converted the separate raw scores to z-scores with a mean of 10 and a standard deviation of 2. Before combining the z-scores, however, we conducted a Pearson correlation on the total data set of 1658 children, using text and BURT scores from February 1998 to December 2001. The correlation between the two scores was significant (0.765,  $p < 0.01$ ) enabling us to combine the two scores into a single reading score. In each school, therefore, raw scores are reported for text level and BURT, with z-scores reported for a combined “reading” score.

**Achievement Data Analysis.** Various analyses are reported for the children’s achievement and include the following:

- Entry Text Level and BURT scores at five years for a small random sample of children in the seven schools
- Baseline Text Level, BURT and Reading scores for the year prior to the interviewed teaching staff participating in the professional development (Year One)
- Text Level, BURT and reading scores for the following year which included six months of the professional development and the immediately following six months (Year Two)
- Text Level, BURT and Reading scores for the following year (Year Three).

The number of six-year-old children assessed in each school for each year is presented in Table 2.3.



**Table 2.3**

**Number of Six-year Old Children Tested in Each School for Each Year**

School	Year One	Year Two	Year Three
A	69	64	81
B	70	59	65
C	53	50	45
D	40	53	44
E	66	50	42
F	63	90	70
G	119	105	64

**School Entry.** While it can be assumed that the children's scores at school entry were unlikely to be significantly different because all the children were attending Decile 1a, 1b or 1c schools, achievement data at five years was available for a small, but random, sample of children in each school. In six of these schools, the children were tested in February 2000 as part of the Phillips et al. (2001) study. Data for the seventh school was collected by the first author because this school was not part of Phillips et al. study.

**Differences Between Schools – Adding Value.** We examined the value schools added to the children's scores in two different ways. The first determined the text, BURT and reading scores for the six-year-old children in Year Three. In most cases, these were the same cohort of children from which this random sample of five-year olds was drawn. A one-way analysis of variance was used to determine the impact of school on achievement with box plots drawn to identify the medians and distribution of the scores over all schools and in each school. The Scheffé method of multiple comparisons was used to establish groupings of schools. The results of this analysis are reported in Chapter Four.

The second measure determined the added value that arose from the professional development from Year One (baseline) to Year Three using a t-test to show the degree to which the obtained difference between the means was better than a chance difference with significance set at  $p < 0.05$ . The educational significance of this difference was determined by the effect size.



**Establishing Baseline.** The main problem experienced in analysing the children's achievement was to establish an appropriate period for Year One as the baseline. Although the criterion for selection in the study was that the teachers participated in the professional development in 2000, we found that schools, in reality, had very different histories in relation to the professional development and the approach to teaching literacy. Some teachers in four schools (C, D, F and G) had undertaken a pilot course initially in the fourth school term in 1998, although this had been a much shorter and less developed course. Schools F and G had followed this with a more intensive course in 1999 but School F experienced a complete change of classroom teaching staff, so participated again in 2000 to train the new staff. Schools (A and C) had undertaken the main professional development in 1999 but had sent more teachers in 2000 because staff turnover (School A) and within-school staff movement (School C) meant that many of the current teachers of Year One children had not been trained in this approach to teaching literacy. School D had not experienced any staff turnover but decided to participate again in 2000 because the professional development formed part of another initiative in which they were involved. For the remaining two schools (B and E), the first half of 2000 was their first direct experience of the professional development, although they were aware of some elements in the programme as a result of contact with neighbouring schools. If we defined the baseline as the year immediately prior to the professional development, which year should be selected? The other difficulty was that if we used a baseline prior to the beginning of 1998, we could only rely on teacher reports of in-school processes at that time, rather than observe them ourselves.

We undertook several different analyses using different baselines for the varying times the schools had participated in the professional development in order to determine if the different starting points made a difference to the relative position of the schools in terms of the children's achievement 18 months after the course had finished. A one-way between-groups analysis of variance was conducted to explore the impact of school on achievement in Year Three using the different baselines.

**Between-school and Within-school Differences.** It was not possible to analyse the data in terms of within-school (that is, between teachers) and between-school differences because the children's scores were not recorded in a form that allowed identification of particular teachers. However, the spread of scores within each school could be



determined through the box and whisker graphs that are presented for the three scores in each school in Appendix One.



## **CHAPTER THREE**

### **CONTEXT, TEACHER ATTITUDES, AND IMPROVED ACHIEVEMENT**

In this chapter we present the trends in student achievement for all schools combined and in the seven schools separately before and after the course and examine the extent to which contextual issues were associated with those trends. The contextual issues considered were the socio-economic status of the schools, the children's entry skill levels and class size. In addition, we examined the teachers' attitudes towards implementing the approach to literacy and how well they implemented it. This analysis allowed us to understand if these variables bore any relationship to different levels of student achievement in the seven schools. Before reporting the analyses, we briefly review the main issues related to the above variables.

#### **Contextual Issues**

Teddlie, Stringfield and Reynolds (2000) underline the importance of the community context in analysing any variable of school effectiveness such as student achievement. They refer to context as "the differential effects associated with certain variables (specifically SES of student body, community type, grade phase of schooling, and governance structure)" (Reynolds, Teddlie, Hopkins, & Stringfield, 2000, p. 163). We also examined within-school contextual factors of class size and teacher turnover to determine if these variables might be associated with differential achievement.

#### **Teacher Attitudes**

In various literatures, including professional development, school effectiveness and school improvement, the importance of teachers' attitudes towards an innovation is considered crucial to its success (e.g. Guskey, 1988). The OECD report (1998) on professional development articulates this position well:



... any policies seeking to use it [professional development] to support educational change need to create a delicate chemistry that results in the willing collaboration of all members of the learning partnership. (p. 12)

There are many published examples of the failure of professional development initiatives because the teachers involved did not perceive the benefits of new ways of teaching (e.g. Coburn, 2001; OECD, 1998).

Teachers may also be differentially motivated to make changes in their practice because they participate in professional development for different reasons. Stout (1996) describes four possible motivations. The first is salary enhancement where the eligibility to compete for merit pay or to climb the career ladder is often tied to demonstrated commitment to personal and professional development. The second, particularly applicable to the United States, is certificate enhancement, with the third related to career mobility whereby teachers take courses to build résumés for the next career step. Stout argues that none of these necessarily leads to better performance and it is only the fourth that motivates this goal. This fourth motivation is a more vaguely defined desire to gain new skills or knowledge to enhance classroom performance.

Stout's (1996) concern is that policy levers related to professional development typically focus on "proof of purchase" which substitutes for investment in either school improvement or individual development. This is evident in the New Zealand situation where performance-appraisal systems require a professional development component to be an integrated component of the appraisal system (Ministry of Education, 1998) and professional standards are strongly participatory. For example, the standards for primary teachers require classroom teachers to encourage others and participate in professional development (Education Review Office, 2000, Section 3.2) with secondary teachers being required to demonstrate commitment to their own ongoing learning [and] participate individually and collaboratively in professional development activities (Education Review Office, 2000, Section 3.2).

Concerns about the "delicate chemistry" of willingness to collaborate and teacher learning, together with participatory requirements of many performance-management systems, mean evaluation of professional development is typically focused on levels of participation and enjoyment (Sparks & Hirsh, 1997, chapter 1) or "happiness quotients" as Guskey (1998) calls them. While enjoyment may promote teacher engagement, there is little evidence that it promotes critical inquiry into raising student achievement.





Evaluation of professional development rarely looks at change in professional practice, let alone how that change impacts on student learning. Sparks and Hirsh (2000) argue that:

The evaluation process needs to shift from counting how many staff members participate and whether they enjoyed the session to determining the needs of the school and the evidence that the program is meeting these needs and improving student achievement. (p. 8)

In the section on teacher attitudes in this chapter, we examined some possible “happiness quotients” and their relationship to student learning outcomes.

### **Programme Integrity**

Although this report is not an evaluation of the literacy professional development itself because this evaluation was undertaken and reported in detail by Phillips et al. (2001), it is reasonable to ask if any variations in student achievement in the different schools were related to how well the approach to teaching literacy was implemented in each school. Ongoing adherence to programme integrity can be a major issue in the sustainability of programmes and achievement, as it is well documented that teaching practice typically drifts from initially high programme integrity to an eclectic mix of the old and the new.

## **Method**

The ways in which the student achievement data were analysed is described in the method section of Chapter 2. Other data used in this chapter were obtained from the Ministry of Education, the school-based interviews and observations of teaching practice and data from the Phillips et al (2001) study. School decile rankings were provided by the Ministry of Education. The children’s intake skill levels were obtained by Phillips et al. (2001) as part of their evaluation of the professional development itself. Descriptions of teacher turnover and the strategies the schools used to accommodate it were obtained from the literacy leaders or principals of each school and details of class sizes from the teachers and literacy leaders. Class sizes were requested from teachers in pre- and post-course questionnaires completed as part of the professional development (see Part One of this report) and during the phase two interviews. Class size is difficult to determine



because New Zealand Year Zero / One class sizes are generally smaller in numbers at the beginning of a school year and gradually increase throughout the year. Phillips et al. (2001) reported that class size had a significant difference on the achievement gains made by the students in their study.

### **Value and Motivation Ratings**

Ratings of the value of the approach to teaching literacy were requested during the phase one and two interviews. In phase one this question read: *“How valuable do you believe the practices covered in the professional development were for teaching literacy in the junior school?”* In phase two the question read: *“Last time we asked you to give a rating for how valuable you believe these practices to be for teaching literacy in the junior school. Can you give a rating for what you believe now?”* In both interviews the same scale of 1–10 was used with the descriptor for 1 representing “Not at all valuable” and the descriptor for 10 representing “Highly valuable”.

Teachers’ ratings of motivation to fully implement the approach to literacy were also obtained during both interview phases. In phase one, the interviewer’s request was: *“Please rate how motivated you feel to fully implement this approach to teaching literacy”*. In the second phase the question read: *“After all this time, how motivated do you feel to continue with a full implementation of the approach to teaching literacy?”* In both phases a rating of 1–10 was used with 1 representing “Not at all motivated” and 10 representing, “Highly motivated”.

### **Implementation Ratings**

We used several different methods to decide if some schools implemented the approach to literacy more fully than others. These included:

- Self-ratings by teachers
- Ratings by second author based on the teachers’ descriptions of their literacy programmes
- Ratings by the second author based on observations of teacher practice
- Teacher reports of retention of elements from the programmes they were using prior to the professional development and whole class teaching.

Ratings were given for the three main components of the approach that we have outlined in the programme description – Reading To, Instructional Reading and Writing. In both



phases, the teachers' requests read: *"Given your understanding of the practices related to 'Reading To', please rate how closely you are implementing 'Reading To'."* A scale of 1–5 was used, with one representing "Not at all", 2 representing, "Some", 3 representing "About half", 4 representing "Mostly" and 5 representing "Fully". The same question structure and scale was used for "Instructional Reading" and "Writing".

In Phase Two the literacy leaders were also asked: *"How well do you think your teachers of Year One students are implementing the practices related to 'Reading To' / 'Instructional Reading' / 'Writing'?"* The same 1–5 scale was used to record the answers.

The ratings assigned by the second author were completed in response to the following questions in the interviews:

- *"Can you think of a child in your class who is achieving well – not your top child, but one who is making good progress? Tell me what you have covered in this child's literacy programme during the last five teaching days."*
- *"Can you think of a child in your class who is not achieving particularly well – not the lowest child – but one who is not making much progress? Tell me what you have covered in this child's literacy programme in the last five teaching days."*

In addition, following the final round of interviews, three teachers in each school were observed by the second author while they taught the three components. Implementation of the three categories of each component was assessed. The same scale was used for all implementation ratings.

## **Memory of Programme**

The phase two interviews were completed a year after the teachers involved completed the professional development. We believed that it was important to find out how well the teachers remembered the key elements of the approach, so we asked each teacher: *"Given that the ECPL professional development finished a year ago, how well do you remember what [the professional development trainer] covered?"* A scale of 1–5 was used, with 1 representing "Nothing", 2 representing "Little", 3 representing "About half", 4 representing "Most" and 5 representing "Everything".

## **Additional Components**

A problem with observations is that they capture only what occurs during the period of the observation. A teacher who may not implement the programme on most days may be



able to do so when observed even though these research observations were “low stakes” in the sense that there was no consequence for the teachers involved. In the phase two interviews, therefore, the teachers were asked: “*Is there anything else you are including in your literacy programme that is not part of the ECL professional development?*” Two reasons lay behind this question. The first was one of programme coherence. If teachers were mixing programme elements it was possible that the children were not receiving a consistent message about what it meant to read. The second reason mentioned by most teachers was that they did not have the time to get through all the key elements within their literacy programmes. The inclusion of additional components would reduce this available time.

## Findings

We first present the analysis of the student achievement in each school, then the variables outlined above that might be associated with the differential achievement. In summary, our findings showed that achievement over all schools improved each year, but that improvement showed very different patterns in the seven schools. However, none of the variables reported in this chapter, with the exception of the schools’ internal training strategies to train new staff, were associated with the differential patterns of achievement.

### Establishing Baseline

In Chapter Two we explained how five of the seven schools had participated in the professional development at times other than the course from which the schools were selected in 2000. The effect of using different baselines was examined in terms of changes in reading scores in Year Three to determine if these made any difference to the achievement in Year three and the schools’ groupings. What was most surprising was the stability of the group to which the schools belonged when the baselines were adjusted for different times the schools had participated in the course. In no case did the changed baselines make a difference to their overall grouping, although the relative position within the groupings did change in two cases. For example, half of the staff in School A undertook the professional development in 1999 with some additional staff being trained in 2000. If we used the later baseline, their mean reading score would have increased from 9.37 in Year Three to 9.49. This latter mean is still the lowest recorded for any school in Year Three and did not change School A’s position. Some staff in School C



also undertook the professional development in 1999 with more staff trained in 2000. If we used the later baseline rather than the earlier one, the mean reading score in Year Three became 10.42, which made it higher than Schools D and E, but not significantly different from them. Similarly, School G undertook the initial professional development at the end of 1998 and again in 1999. If we used the earlier baseline, the mean in Year Three was lowered from 11.43 to 11.20. This mean was still the highest attained at any school.

We decided on the final baseline as being the year prior to the time most of the teachers in the school undertook the professional development. The dates of the baselines are presented Table 3.1.

**Table 3.1**

**Period of Baseline for the Different Schools**

School	Baseline
A	Second 6 months of 1998 and first 6 months 1999
B	12 months of 1999
C	Second 6 months of 1998 and first 6 months 1999
D	12 months of 1999
E	12 months of 1999
F	12 months of 1999
G	12 months of 1998

**Student Achievement**

Achievement trends are reported for the three scores (text, BURT, and reading – combined text and BURT) for all schools and then for the schools separately.

**Sustainability of Achievement for All Schools**

The text level, BURT and reading scores for all schools are presented in Figures 3.1, 3.2 and 3.3. Year One was the year prior to the professional development, Year Two was the



six months of the professional development and the following six months, Year Three was the following year. As can be seen from these figures the initial gains in text and reading scores in Year Two continued into Year Three. BURT scores did not improve in Year Two but did so in Year Three. The differences in achievement between Years One and Three were significant for the three measures of text level, BURT and reading ( $t=5.45, 2.67, 4.04$  respectively,  $p<0.01$ ). However, the effect sizes overall were relatively small (text level 0.37, BURT 0.18, reading 0.28).

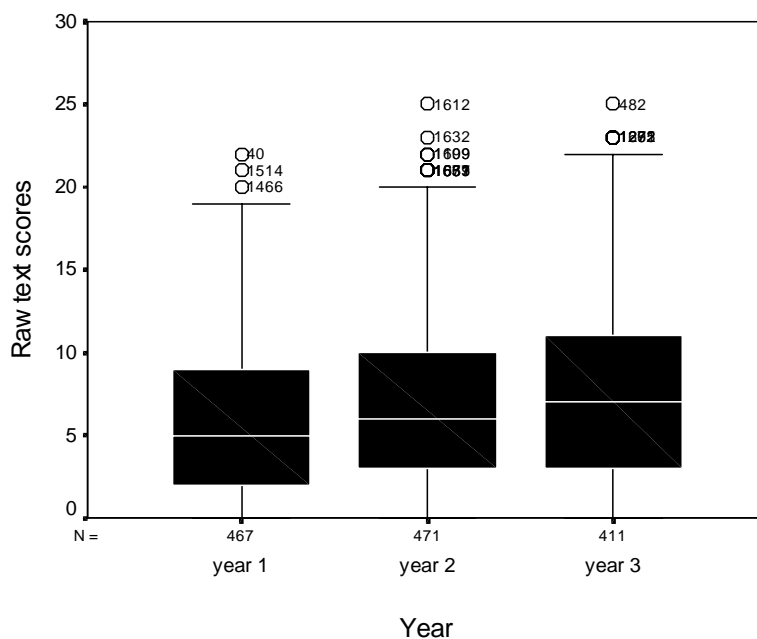
**Table 3.2**

**Means and Standard Deviations for all Schools for the Three Years**

Score	Year One		Year Two		Year Three	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Text	6.00	4.91	6.97	5.46	7.95	5.65
BURT	10.98	8.35	11.08	8.89	12.61	9.27
Reading	9.78	1.87	9.96	2.03	10.34	2.13

**Figure 3.1**

**Text Raw Scores for all Schools Over Three Years**



### BURT Raw Scores for all Schools Over Three Years



Box plot showing Reading transformed Z scores for Year 1, Year 2, and Year 3. The y-axis is labeled 'Reading transformed Z scores' and ranges from 6 to 18. The x-axis is labeled 'Year' with categories 'Year 1', 'Year 2', and 'Year 3'. Each box plot shows the median, quartiles, and range. Outliers are labeled with their N values.

Year	N	Min	Q1	Median	Q3	Max	Outliers (N)
Year 1	428	7.1	8.4	9.3	10.7	14.2	14.2 (5), 14.3 (1), 14.4 (1), 14.5 (1), 14.6 (1), 14.7 (1), 14.8 (1), 14.9 (1), 15.0 (1), 15.1 (1), 15.2 (1), 15.3 (1), 15.4 (1), 15.5 (1), 15.6 (1), 15.7 (1), 15.8 (1), 15.9 (1), 16.0 (1), 16.1 (1), 16.2 (1), 16.3 (1), 16.4 (1), 16.5 (1), 16.6 (1), 16.7 (1), 16.8 (1), 16.9 (1), 17.0 (1), 17.1 (1), 17.2 (1), 17.3 (1), 17.4 (1), 17.5 (1), 17.6 (1), 17.7 (1), 17.8 (1), 17.9 (1), 18.0 (1)
Year 2	471	7.1	8.4	9.3	10.7	15.3	15.3 (1), 15.4 (1), 15.5 (1), 15.6 (1), 15.7 (1), 15.8 (1), 15.9 (1), 16.0 (1), 16.1 (1), 16.2 (1), 16.3 (1), 16.4 (1), 16.5 (1), 16.6 (1), 16.7 (1), 16.8 (1), 16.9 (1), 17.0 (1), 17.1 (1), 17.2 (1), 17.3 (1), 17.4 (1), 17.5 (1), 17.6 (1), 17.7 (1), 17.8 (1), 17.9 (1), 18.0 (1)
Year 3	411	7.4	8.6	10.0	11.8	15.8	15.8 (1), 15.9 (1), 16.0 (1), 16.1 (1), 16.2 (1), 16.3 (1), 16.4 (1), 16.5 (1), 16.6 (1), 16.7 (1), 16.8 (1), 16.9 (1), 17.0 (1), 17.1 (1), 17.2 (1), 17.3 (1), 17.4 (1), 17.5 (1), 17.6 (1), 17.7 (1), 17.8 (1), 17.9 (1), 18.0 (1)

### **Sustainability of Achievement for Individual Schools**

A way-way analysis of variance in Year Three showed a significant difference between the schools for each score: Text [ $F(6,406)=11.975, p<0.01$ ]; BURT [ $F(6,406)=6.4750, p<0.01$ ]; Reading [ $F(6,406)=8.736, p<0.01$ ]. A Sheffé test of multiple comparisons on the combined reading score for each school established that the schools fell into three groups that were significantly different from one another ( $\alpha.05$ ). In Year Three, the reading scores in Schools A and B (Group One) were significantly different from those in Schools C, D, and E (Group Two), which were, in turn, significantly different from those in Schools F and G (Group Three).

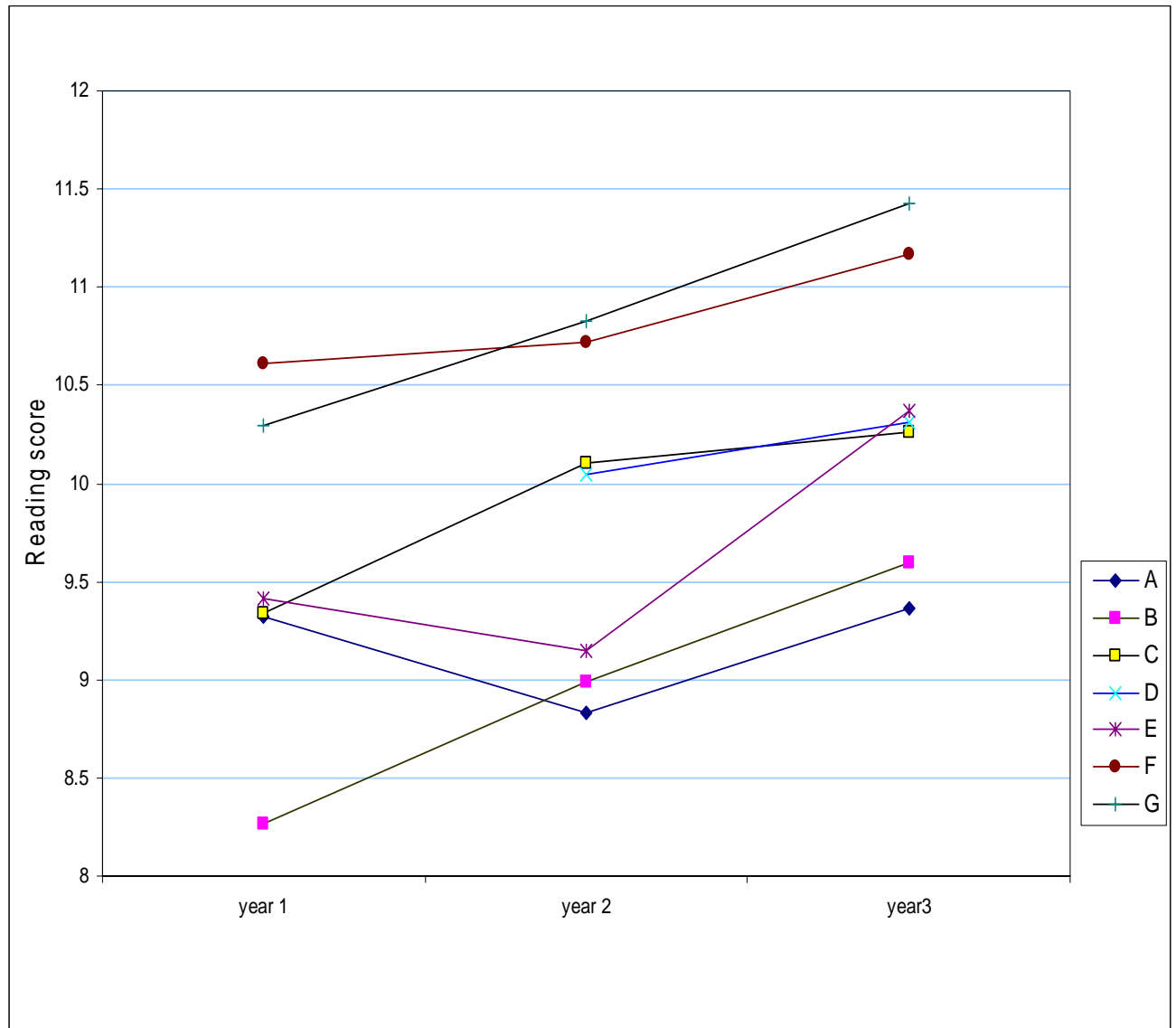
The means and standard deviations for the reading score (combined Text and BURT) in each school for each year are presented in presented Figure 3.4 and Table 3.3.





**Figure 3.4**

**Reading Scores for Each School Years One, Two and Three**



### **Added Value from Baseline**

In Table 3.3 we present t-test results and effect sizes for the reading measure for Years One and Three. As can be seen from this table Schools B, C, E and G showed a significant difference in their reading scores between Years One and Three. However, only School B showed an effect size greater than 0.4 per year which Hattie (1999) argues is the standard that should be used when judging the significance of educational innovation.

The patterns of achievement over the years in these four schools were very different. School B began with a very low baseline. Although the scores showed steady improvement over the three years, the Year Three scores failed to match any of the other schools that showed greater progress. School C made most of its gains in achievement between Year One and Two while School E declined in Year Two but improved significantly in Year Three. School G showed a steady increase over the three years.

The relatively small effect size for School F can be largely attributed to the initially high baseline. Their gains were steady over the three years but increased more between Years Two and Three than over the earlier period.

The patterns in the other two schools were very different. School A's achievement declined in year Two and returned to baseline in Year Three. In School D the Year One data were unreliable so have not been included in this table. The reading scores showed a small but insignificant increase between Years Two and Three.

The patterns of achievement within each school are presented in box and whisker graphs for the separate scores of text level, BURT and reading for each school in Appendix One.



**Table 3.3****Reading Scores for Each School in Years One, Two and Three**

School	Year One	Year Two	Year Three	t- test – Years One and Three	Effect size – Years One and Three
Group One					
A	9.32 (1.57)	8.83 (1.25)	9.37 (1.56)	0.14	0.04
B	8.26 (0.94)	8.99 (1.72)	9.59 (2.08)	4.83**	0.88
Group Two					
C	9.33 (1.58)	10.11 (2.03)	10.26 (2.09)	2.49*	0.51
D		10.04 (1.58)	10.31 (1.63)		
E	9.41 (1.29)	9.15 (1.37)	10.37 (1.81)	3.21**	0.62
Group Three					
F	10.61 (1.92)	10.72 (2.19)	11.17 (2.34)	1.74	0.26
G	10.23 (2.06)	10.83 (2.29)	11.43 (1.27)	3.00**	0.68

Note: \*p<0.05; \*\*p<0.01

**Socio-economic Status**

All schools were of similar socio-economic status because they were located in the low-income suburbs of Mangere and Otara and were classified by the Ministry of Education as Decile 1a, 1b or 1c. In order to assess if these subcategories of Decile One impacted on



achievement, we listed the schools in order of their achievement in Year Three and their decile ranking. Table 3.4 indicates that there was no systematic variance in achievement associated with decile ranking.

**Table 3.4**

**School Achievement Groupings and Decile Rankings**

School	Decile ranking
A	1a
B	1b
C	1b
D	1b
E	1c
F	1b
G	1a

**Intake Skill Levels**

Text level and BURT scores were used to assess intake skill levels because these scores were used a year later when the children were six to determine progress. Failure to score on either text level or BURT was scored as 0. Text level was scored as 1 or more if the child had mastered the words and skills required for that level (this would normally be recorded as text level 2 in the school setting). The BURT scores indicate the number of words recognised on the list. These scores were not combined into a reading score and are reported as raw scores only because the small number of students, the low variability in the scores between schools and the high standard deviations made statistical analysis unreliable. As can be seen in Table 3.5, few children scored on either test on school entry and there was no consistent pattern among the schools.



**Table 3.5****Means and Standard Deviations for Text and BURT for a Random Sample of Five-Year-Old Children in the Seven Schools**

School	Text		BURT	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
A (N=9)	0.33	0.50	0.11	0.33
B (N=9)	0.00	0.00	0.11	0.33
C (N=8)	0.38	0.52	0.13	0.35
D (N=11)	0.55	0.69	0.00	0.00
E (N=10)	0.00	0.00	0.00	0.00
F (N=23)	0.23	0.43	0.26	0.75
G (N=10)	0.38	0.60	0.18	0.40

**Teacher Turnover**

Sustainability of any professional development is difficult over a period of two years in a situation of high staff turnover. Ongoing training opportunities for new staff were available because the professional development contractor was offering the professional development to other schools after the completion of the initial course. However, sending staff on these courses was relatively expensive for the schools, even though the costs were subsidised by the Ministry of Education. Additional training was also highly disruptive to schools, in that teachers were out of class for half a day each fortnight to allow them to participate.

Schools were classified into four categories based on the number of teachers leaving over the two-year period. In high-turnover schools five or more teachers left the school; in medium-turnover schools, three to four teachers left the school; low-turnover had only one or two teachers leave; with no-turnover schools having a stable staff over two years in question. School A had additional challenges with staff training in that the way in which the classes were structured led to a situation where a small number of Year Zero / Year One children were spread over a number of classes. Given the high turnover, it was extremely difficult for this school to maintain a strong group of trained teachers.



Additional information was sought on the strategies used within each school to alleviate some of the effects of staff turnover. All literacy leaders had attended the professional development with their teachers, so it was possible for schools to establish internal training processes to alleviate some of the problems that could arise from staff turnover. The rates of turnover and strategies adopted by the schools to cope with this turnover are summarised in Table 3.6. It appears from Table 3.6 that turnover bore little relationship to student achievement over the two-year period. The medium and high turnover schools where student achievement remained high, however, had better internal strategies for dealing with turnover than the other schools.

**Table 3.6**

**Staff Turnover Rates and Schools' Internal Strategies**

School	Turnover categorisation <sup>1</sup>	Internal strategies
A	High	None
B	No turnover	NA
C	Medium	Internal training
D	No turnover	NA
E	No turnover	NA
F	High	Internal training
G	Medium	Internal training and long-term relievers trained with tenured staff to ensure a pool to replace staff resignations

<sup>1</sup> High turnover – 5 or more teachers left;  
Medium turnover – 3 to 4 teachers left;  
Low turnover – 1 or 2 teachers left;  
No turnover – no teachers left.

In-school training strategies mainly involved the new teachers being observed and coached by the literacy leader, and observing more experienced teachers. In School F the senior teacher described how she liked to accompany the teacher she was training to the



observation so that she could point out what they were supposed to be looking for and to discuss it after the observation.

*Interviewer: Tell me some of the sorts of things you set up.*

*Senior teacher: We would ask a teacher how a book was oriented, introduced, how the teacher dealt with any errors that the children made and the strategies they would use to go back and actually get the correct meaning. The affirmation of what you must see, must say and vice versa. Then looking on the word work that the children are orienting the correct sequence, the writing.*

*Interviewer: So it is that precise?*

*Senior teacher: It is that precise, absolutely precise...*

*Interviewer: So what happens after they came out of there?*

*Senior teacher: Then we would sit down and discuss what they had seen. If what they had seen was any different in the way that they were doing things. Would there be anything that they would change from what they were currently doing.*

*Interviewer: And have you given any feedback to them after they had been in and observed and talked about it?*

*Senior teacher: I feedback all the time. It is pointless doing any observation unless you are able to feedback.*

## **Class Size**

Predictably, class sizes varied both within the schools at the three points of time and between schools (Table 3.7). Apart from School G where the school policy was to keep class size to a maximum of 16 students, there appeared to be little relationship between class size and the three groupings of schools.



**Table 3.7**

**Year One Class Size**

School	Pre-course questionnaire	Post-course questionnaire	Phase two interview
A	15	25	22
B	18	26	25
C	18	14	24
D	20	13	25
E	14	21	25
F	21	26	26
G	16	16	16

**Valuing of Approach**

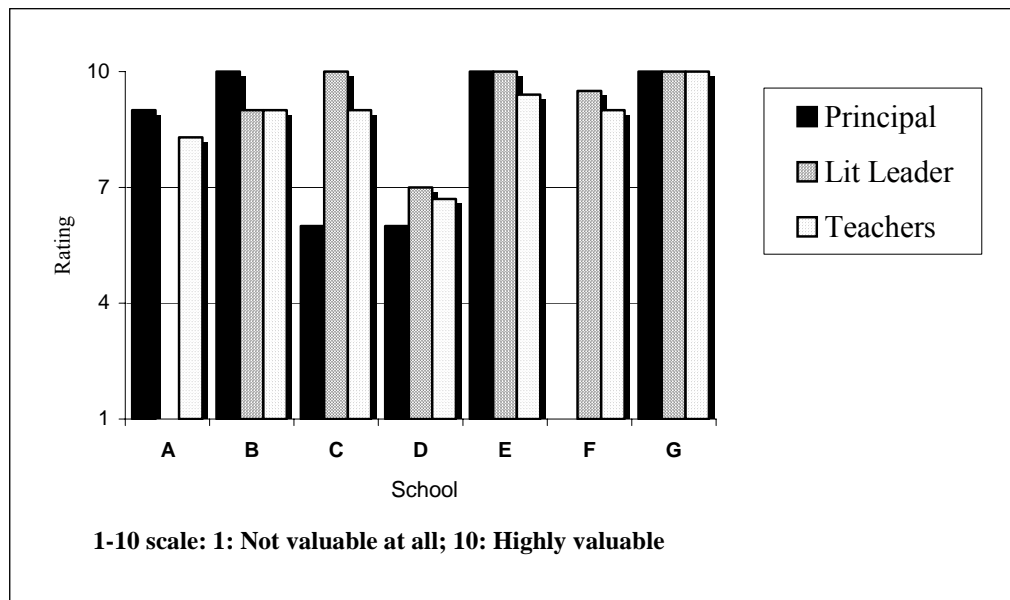
We turn now to the extent to which the participants valued the approach to literacy because of the impact it may have on their motivation to implement it. Figures 3.5 and 3.6 indicate that all the principals, literacy leaders and teachers rated the approach as highly valuable except in School D. Valuing the approach did not serve as a discriminator between those schools whose students achieved better than the others. School D had recently introduced an individualised approach to reading and they wished to retain these methods. They decided, therefore, to integrate some elements of the approach taught in the professional development into their individualised programme, rather than adopt the alternative completely. They did not take this decision lightly, but rather decided that they valued their individualised approach more highly than the one taught in the professional development.





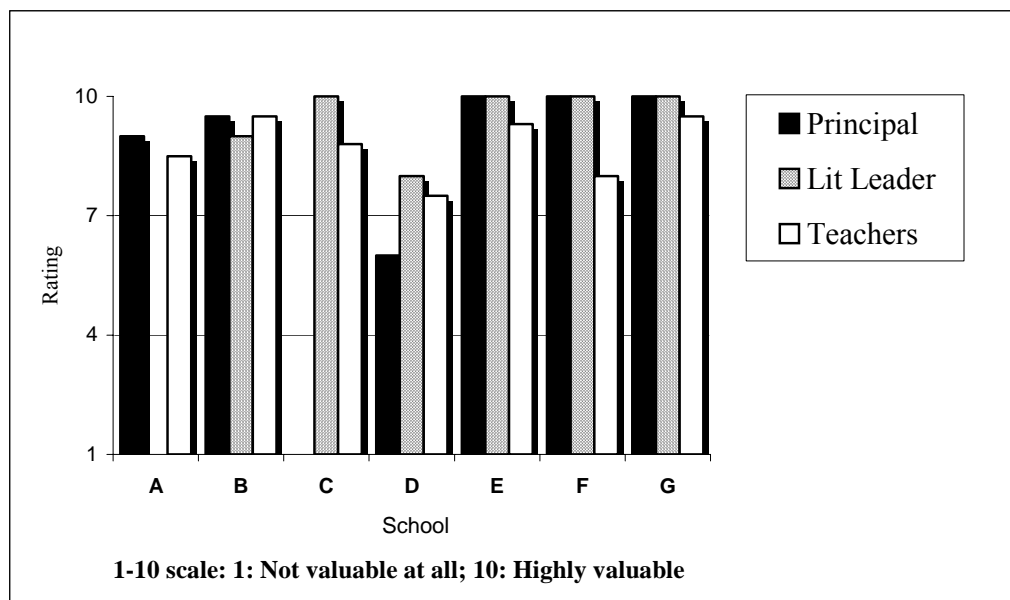
**Figure 3.5**

**Value Ratings for the Approach in Teaching Literacy in Phase One Interviews**



**Figure 3.6**

**Value Ratings for the Approach to Teaching Literacy in Phase Two Interviews**

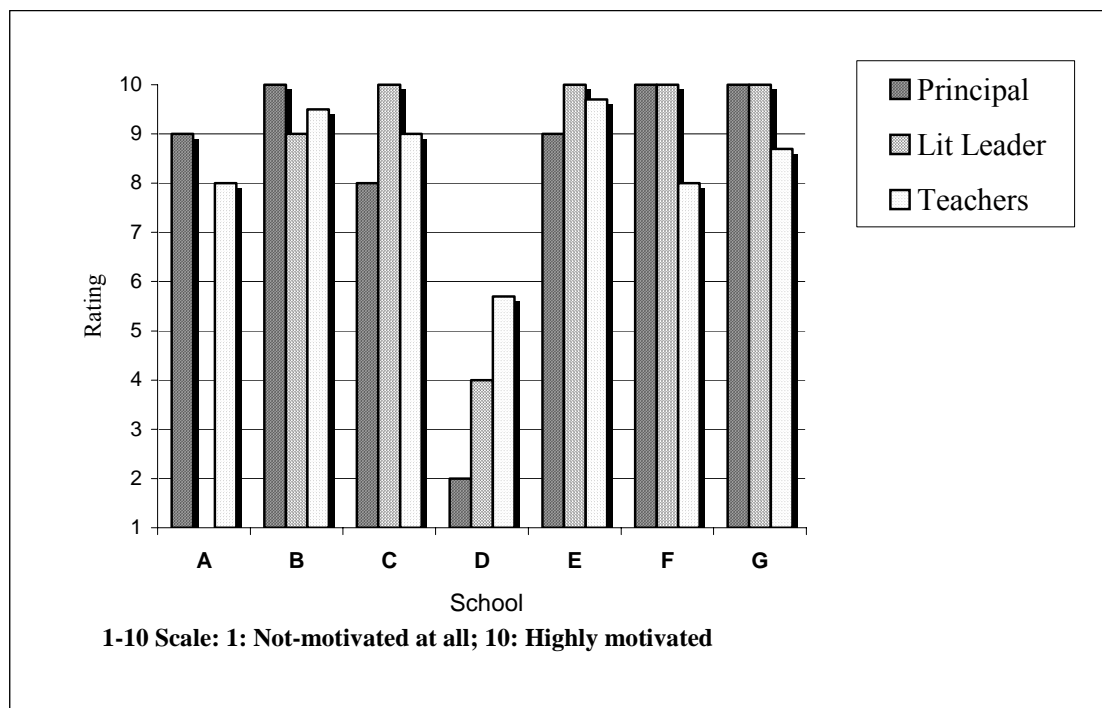


### Motivation to Fully Implement the Approach to Literacy

The pattern for the motivation ratings to fully implement the approach to teaching literacy (see Figure 3.7) is very similar to those for teachers' ratings of value (see Figures 3.5 and 3.6). The Phase One and Phase Two ratings were very similar, so we have presented the Phase Two ratings only. These ratings did not differentiate the schools, apart from School D. It appears from these figures that more than highly motivated teachers needs to be in place if high student achievement is to follow. While high motivation may be a necessary condition for high student achievement, it is not sufficient.

**Figure 3.7**

#### Principals, Literacy Leaders and Teachers' Ratings of Motivation to Fully Implement the Approach to Teaching Literacy in Phase Two



## Implementation Integrity

In this section, we examine how well the approach to literacy was actually implemented by the teachers involved. Given the improved student achievement reported in Phillips et al. (2001) over all the schools, differential implementation could explain the differential student achievement. The interviewer's and teachers' self-ratings were very similar (see Table 3.8) so we have omitted them from Table 3.9.

As can be seen from Tables 3.8 and 3.9, implementation ratings do not show any systematic relationship to achievement. Not surprisingly, School D had lower implementation ratings than the other schools because they chose not to fully implement the approach. Those schools with high achievement implemented the approach well, but some of those with lower achievement also implemented the approach well, at least in terms of our measures. A note of caution needs to be sounded, however, about these ratings. They were made against set criteria and were not an in-depth analysis of the subtle interactions that occur between teachers and their students that are so powerful in assisting learning. Nor could they take into account what happened at other times, for example, when the observer was not present. What these ratings do show is that on the basis of self-reports and relatively short-term observations, implementation did not discriminate between the schools.

**Table 3.8**

### Implementation Ratings from Phase One Interviews

School	Interviewer ratings				Teachers' self-ratings			
	Reading To	Instruct- ional	Writing	Total score	Reading To	Instruct- ional	Writing	Total score
A	1.8	4.7	1.7	8.2	2.0	4.3	1.8	8.1
B	2.0	4.6	3.9	10.5	1.8	4.8	3.8	10.4
C	1.9	4.0	4.1	10.01	2.7	3.7	4.2	10.6
D	1.0	1.6	1.3	3.9	3.6	3.3	2.8	9.7
E	2.3	4.0	2.7	9.0	3.2	4.7	3.7	11.6
F	1.1	3.9	2.9	7.9	1.0	5.0	4.0	10.0
G	2.8	4.7	3.9	11.4	3.3	4.3	4	11.6



**Table 3.9****Implementation Ratings from Phase Two Interviews and Observations**

School	Interviewer ratings				Observer ratings			
	Reading To	Instruct- ional	Writing	Total score	Reading To	Instruct- ional	Writing	Total score
A	3.0	4.4	3.2	10.6	2.3	5.0	3.3	10.6
B	1.8	4.1	3.3	9.2	3.3	5.0	4.5	12.8
C	3.4	4.5	4.8	12.7	1.0	4.2	4.9	10.1
D	1.2	2.3	2.3	5.8	1.2	2.3	2.3	5.8
E	4.2	5.0	4.5	13.7	5.0	4.3	5.0	14.3
F	3.0	5.0	4.8	12.8	3.6	4.8	5.0	13.4
G	4.1	4.7	5.0	13.8	2.2	4.9	5.0	12.1

Other trends in these ratings, however, are interesting in that few schools implemented the “reading to” component well. Teachers were aware of this, but found it too difficult to fit all programme components into the allocated reading time. They also found it difficult to maintain classroom behaviour-management strategies when reading to a small group of children for a sustained period of time. Another issue of interest is the similarity between the teachers’ self-ratings and the interviewer’s ratings. Teachers appeared to be well aware of the integrity with which they implemented the three components of the approach.

### Memory of the Programme

Most teachers indicated in their ratings that they remembered most of what had been covered in the professional development. There was little difference between the schools. The highest ratings were from two teachers in School G who gave their memory of the programme a rating of 5 representing “Everything”. All other teachers gave ratings of 4 representing “Most” of what was taught, except for two teachers, one from School D and another from School F who gave a slightly lower rating of between 3 and 4. It appeared that, for most of these teachers, the training was highly memorable.



**Retention of Previous Components and Whole Class Teaching.** All teachers were asked about the components they had retained from their earlier programmes and if they had added any new components that were not part of the approach taught in the professional development. In schools F and G all interviewed teachers immediately responded that they did not include other elements in their programmes because they did not have the time to teach all that they needed in the teaching approach covered in the professional development. One teacher in School A also responded in this way. All others, however, retained varying components of their previous programmes, including handwriting, shared book, phonics, spelling, dictation, dictated stories, alphabet games, high-frequency sight word drills, and various whole-class activities. They reported that they did so because they believed the “extras” to be important for children to get all necessary literacy skills. For example, one teacher explained why she retained whole-class lessons for handwriting, *“The children need it and it is something that I can’t throw out as it is like throwing out the baby with the bath water.”* It was not possible to accurately quantify these “extras” in a reliable way. However, the categorical rejection of “extras” by teachers in the two schools with the highest achievement indicate that they not only implemented the programme when observed by the second author, but probably continued to do so when not observed.

## Discussion

The achievement in the schools varied significantly and fell into three groups in Year Three (the second year of implementation). Achievement was similar within each group but significantly different between the groups. None of the contextual factors (decile ranking, children’s entry skills, rates of teacher turnover), class size, or the attitudinal measures of those involved, or how well the approach was implemented (to the extent we measured this), was systematically associated with the achievement in the different groups of schools. The only variable we have presented in this chapter that appeared to have some association with achievement was the in-school training strategies the schools adopted to manage teacher turnover. These strategies were not needed in all the schools, because some had very low staff turnover, but the two schools with high achievement had moderate and high staff turnover. In both these schools the senior staff took a very proactive role in inducting and training new staff.



If we are to focus our professional development efforts on those issues that are associated with improved student achievement, we cannot look to the measures used in this chapter. While there may well be a “delicate chemistry” between obtaining teacher collaboration and teacher learning, getting the chemistry right does not ensure outcomes for students. While we did not measure teacher satisfaction with the professional development directly, it could be assumed that valuing of the approach to professional development and expressing high levels of motivation to implement it could contribute to Guskey’s (1998) “happiness quotients”. As Guskey so rightly claims, these indicators are not sufficient to ensure improved student achievement.



## CHAPTER FOUR

### PROFESSIONAL LEARNING COMMUNITIES AND ACHIEVEMENT

*“We had to postpone the meeting until today but I have made the graph available to some of you already ... instead of waiting until today because it would have meant that we lost a few valuable days if we waited until today to action this tomorrow. So I have said to some of you to have a look at it and see if we can make some improvement to our teaching, and some of you have.”*

Literacy leader, School G

In Chapter One, we made the case that student achievement was most likely to be enhanced if teachers engaged in practice-based inquiry with their colleagues that questioned their assumptions and challenged them to be consciously thoughtful about their goals, practices, students and contexts (Richardson, 1994). In this chapter we have looked more closely into the qualities of the professional learning communities that were most likely to have this impact.

#### **The Qualities of Professional Learning Communities**

The central argument for the development of strong forms of professional learning communities is the presumed link between the school professionals’ social organisation and the ability to make meaningful changes in classrooms (Dilworth, 1998). If teaching involved routine drills and worksheets, then strong forms of professional learning communities would be unnecessary (Toole & Louis, 2001). They become important only when schools attempt to make deeper changes in teaching and learning. The type of deep knowledge that teachers need to be successful includes knowledge of subject matter content that emphasises meanings and connections, not just procedure and information; knowledge of what individual children are like; an expanded sense of what it means to learn; and pedagogies that help them connect children and content (Ball & Cohen, 1999).



Reyes, Scribner and Scribner (1999) attribute this kind of collaborative learning culture to the high levels of student achievement in their study of effective Hispanic schools in low socio-economic communities. As they describe it,

In any school a most valuable resource is the teachers. In these schools that resource was multiplied through consistent, intensive, and productive sharing and collaboration among teachers. It would be hard to overestimate the value of the collaborative efforts in these schools. (p. 162)

Kruss, Louis and Marks propose five interrelated variables distinctive of and critical to a strong professional community (Louis, Kruss, & Marks, 1996; Louis & Marks, 1996; Louis, Marks, & Kruse, 1996). First, it has shared norms and values, and collectively agreed-on professional beliefs. An example of such a belief is that all students can learn successfully. Second, it has a clear focus on student learning, so that establishing students' intellectual growth forms a prime professional goal for the professional community. Third, it promotes reflective dialogue whereby teachers reflect on and evaluate their professional practice and its consequences with colleagues. Fourth, it emphasises deprivatisation of practice, because continuous reflection on and improvement of practice requires interaction with and feedback from colleagues. Fifth, it seeks collaboration as teachers participate in reflective dialogue; observe and react to one another's teaching, curriculum, and assessment practices; and engage in joint planning and curriculum development.

It is easier, however, to write about professional learning communities than to create them and engage in the appropriate dialogical processes. As Louis, Toole and Hargreaves (1999) note, to say that professional learning communities can aid in lasting change is not to say that it is always the case. A professional community can equally well support traditional norms and practices that are not conducive to teacher and student learning. Little (1990) explains that from the beginning of the American movement constructs involved in building professional learning communities were "conceptually amorphous" (p. 509). For example, "collegiality" was often confused with congeniality, or conviviality – a friendly faculty that enjoys each other's company. Simply having a happy faculty lounge or teachers sharing their favourite bag of tricks is not sufficient. In the weak form of professional communities, staff's collaboration takes place only incidentally, like when they are telling classroom anecdotes; or offering help when asked; or sharing ideas without critically examining or refining them. These weak ties of





collaboration or collegiality may simply reinforce bad habits (Little, 1990), and become bounded in ways that protect norms of privacy and exclude deep investigation into teaching and learning (Fullan & Hargreaves, 1996). Timperley and Robinson (1998) document how one school in New Zealand engaged in collegial processes that had little effect on teacher behaviour, let alone student learning. When professional communities are conceptualised in these weak forms, it is not surprising that research shows that implementation of reforms aimed at fostering teacher community are often received with a mix of confusion, mild concern and doubt (Feiman-Nemser & Floden, 1986; Little, 1990; Merz & Furman, 1997; Smylie, 1992).

Unfortunately, we do not yet have serious comparative and longitudinal studies of professional learning communities that are needed to detail how they work and under what conditions (Little, 1999). However, it is now generally believed that effective and sustainable professional learning can only be enhanced through strong professional learning communities rather than weak ones.

### **Professional Communities and Student Achievement**

In Chapter One, we emphasised the need for teacher learning to focus on raising student achievement because the ultimate goal of professional development is to improve teaching and learning. Schools are in the business of educating students, not teachers (Camburn, 1997). How that student achievement is defined and measured, however, will have a major impact on the focus of teacher engagement. If superficial drills and skills are equated with achievement, there is ample evidence to show that teachers become adept at teaching them, particularly when the stakes are high. Fortunately, in the current study the teachers were focused on developing text reading in their children, rather than discrete, lower-level knowledge components, so it is this on which they focused in their professional learning communities.

In this chapter, we sought to understand if the differences in student achievement in text levels and BURT as described in Chapter Three were associated with different forms of professional learning communities in the seven schools.



## **Method**

The data-collection methods for this chapter included meeting observations, interviews of the teachers and their literacy leaders and relevant student achievement information. These measures are described below.

### **Meeting Analysis**

In each school, we asked to observe and tape record two meetings when teachers either discussed the approach to teaching literacy or the literacy achievement of the Year One students. Two schools (A and C) held only one meeting that met these criteria so only one meeting is included in the analysis. In School A, the principal reported that informal discussions about the professional development and the difficulties implementing it were held as part of the syndicate meetings but they did not have specific meetings just for the this initiative because they had previously planned their school-wide professional development prior to establishing the initiative. Meeting topics and how they fitted into scheduled meetings are summarised in Table 4.1.



**Table 4.1****Meetings Analysed for Each School**

School	Topic of meeting	Regularity of meetings
A	Implementation of writing programme	Only meeting held in relation to the professional development and arranged for the researchers. Other in-school professional development meetings were previously arranged for first year and not a nominated priority for second year.
B	Children's achievement and programme implementation	Held irregularly both years
C	Programme implementation after professional development	Held regularly during first year. Not held during second year
D	Children's achievement on Observation Survey	Only meeting held
E	Meeting 1 – programme implementation Meeting 2 – programme implementation to improve writing achievement	Regularly held during professional development Four meetings in 2001 focused on raising achievement in written language
F	Children's achievement and programme implementation	Regular meetings twice per term
G	Children's achievement and programme implementation	Regular meetings once per term

Two levels of analysis were used for the meetings. The first level comprised features independent of the dialogue analysis. These measures included the regularity of scheduled meetings related to the programme, the length of the meeting, the presence or absence of benchmarked and class achievement information and the topic of the meeting.



The second level involved a dialogue analysis. The tape recorded transcripts of each meeting were coded by the first author and independently checked by a teacher in her second year of teaching who had no other involvement with the research. Disagreements in coding were discussed and resolved to the satisfaction of both coders. The coding schedule is in Appendix Two.

The coding categories were designed to be mutually exclusive and a single code was assigned to whatever length of text was relevant to that code. Typically the unit of analysis was a sentence or paragraph. Sometimes the same code applied to several paragraphs. The coding schedule was developed to distinguish among the following types of meeting discussions:

- Teaching related problems and solutions
  - Not specific or specific to particular teachers
  - Achievement data used or not used to identify problems
- Non-teaching related problems and solutions
  - School organisation based
  - Outside of school
- Descriptions and evaluations of achievement and teaching practice
  - Neutral descriptions
  - Positive or negative evaluations
- Distractors (e.g. unrelated topics, unrelated organisational issues).

The percentage of time spent for any one code was calculated by using the number of lines per topic as a proportion of the total time.

Quotes were extracted from the transcripts to illustrate the meaning of particular codes and how they reflected the differences in meeting style and content.

## **Interviews**

The interview timetable is described in Chapter Two of this report. The particular lead questions used for the analysis are presented below, with rating scales, interviewees and phase to which they apply indicated in brackets:



## Meetings

- *This year, have you have any organised opportunities to discuss your teaching of this programme?* (Phases One and Two: literacy leaders and teachers)
- *This year, have you participated in any informal opportunities where you have discussed the teaching of this programme?* (Phases One and Two: literacy leaders and teachers). If “yes” to either of the above, *Please tell me about the most significant thing you have learnt from other teachers in these discussions.*
- *Please describe any concerns you have had with implementing the programme.* (Phases One and Two: literacy leaders and teachers)

## Use of Achievement Data

- *Do you keep individual records on the Year Zero – One children’s reading achievement?* (Phases One and Two; literacy leaders and teachers)
- *Do you or your literacy leader collate these records?* (Phases One and Two: literacy leaders and teachers)
- *Have you discussed the literacy achievement levels of the children in your class with anyone else this year?* (Phase Two; teachers)
- *Have you discussed the literacy achievement levels for the children in Year One classes with all teachers involved in Year One?* (Phase Two; teachers)
- *Please tell me the most significant thing you have learnt from looking at the students’ achievement data in relation to the implementation of the ECPL programme.* (Phase Two; teachers)
- *Have the data influenced any decisions about how the programme has been or will be implemented in your class?* (Phase Two; teachers)
- *Different people place different emphasis on the importance of analysing achievement data. Please rate the following* (Phase Two; teachers):
  - a. *I consider that analysing achievement data is a very important component in helping me teach effectively.* A scale of 1–5 was used with one representing “Strongly disagree”, 2 representing “Disagree”, 3 representing “Neither agree nor disagree”, 4 representing “Agree”, 5 representing “Strongly agree”.
  - b. *I am concerned that achievement data might be used in negative ways* (Participants and rating scale the same as the previous question)



### **Observations and In-class Support**

- *This year, have you had an opportunity to observe other teachers teaching this approach to literacy?* (Phases One and Two: literacy leaders and teachers)
- *Please tell me what you learned and how you learned from this observation.*
- *Have you been observed by anyone when you have been teaching this approach to literacy? If “yes”, Please tell me about it.* (Phases One and Two: literacy leaders and teachers)
- *Please tell me what you learned and how you learned from this observation* (Phases One and Two: literacy leaders and teachers)

Concerns about accountability have often been raised in connection with achievement data, so we also searched the interview transcripts for the words “accountable” and “accountability”.

### **Written Analysis of Achievement Data**

School A did not routinely discuss the programme or the achievement information in meetings, but this did not mean that they neglected achievement. Each term, a summary of the reading levels in the class were collated by the literacy leader and returned to the teacher for comment on the following:

- Reasons for lack of movement of children
- Reasons for positive movement of children
- Identification of how teachers will try to move children’s reading progress over the next term.

The comments were then discussed with the teachers concerned. These discussions were confidential and so we were unable to observe them. However, the written comments were analysed using the same categories as were used in the meetings.

### **Student Achievement Information**

The same student achievement data that were described in Chapters Two and Four were used in this chapter also. However, text levels were of particular interest because nearly all meetings that either incorporated achievement information into their deliberations or discussed programme implementation also focused on text levels. The two exceptions were School A’s meeting where the writing programme was the focus because most of the teachers had not had the writing component in their professional development and the



second meeting at School D because they had decided to do an action research project on writing.

## **Results**

For the purpose of this analysis the schools are divided into three groups on the basis of the student achievement information presented in the previous chapter:

- Schools A and B (Group One)
- Schools C, D and E (Group Two)
- Schools F and G (Group Three)

### **Meeting Analysis – Non-dialogical Features**

The first level of analysis for the meetings involved categorising the non-dialogical features and are summarised in Table 4.2. All schools, except School E, followed very similar patterns for each of the two meetings. School E had two very different meetings in the two separate years. The first meeting took place during the professional development and teachers were invited by the literacy leader to discuss problems they were having with programme implementation. The second arose from an action research project in which they analysed their year-level written language scores for the first time and implemented a new initiative to improve those scores.



**Table 4.2****Analysis of Meetings**

School	Achievement data discussed				Implementation discussed
	Regularity of schedule	Length of meeting	Benchmarked achievement data for year level	Achievement data for class	
A	Not scheduled	NA	NA	NA	One meeting
B	Irregularly	1 hour	Yes	No	Irregularly
C	Not scheduled	NA	NA	NA	Irregularly – 1 <sup>st</sup> year only
D	One in Year two	1 hour	Yes	No	Not scheduled
E	Irregularly – 2 <sup>nd</sup> year only	20– 30 mins	2 <sup>nd</sup> year only	No	Irregularly – 1 <sup>st</sup> year only
F	Regularly (x2 per term)	30 mins	Yes	Yes	Regularly – same meeting
G	Regularly (x1 per term)	1 hour	Yes	Yes	Regularly – same meeting

What is evident from Table 4.2 is that the schools in Group Three (F and G) met regularly, with both class level and year level achievement information available. Implementation issues were discussed in the context of this information. No other process identified in Table 4.2 appeared to be so consistently related to the differential achievement evident in the schools. School B also had year level data available for discussion, but it was not separately analysed for individual teachers. The presence of this cohort information without class-specific information at the meeting appeared to have little impact on children's achievement.

In order to illustrate the form in which the data were presented at the meetings, we have inserted a graph of the type that was used as the basis for discussion in Figure 4.1. The



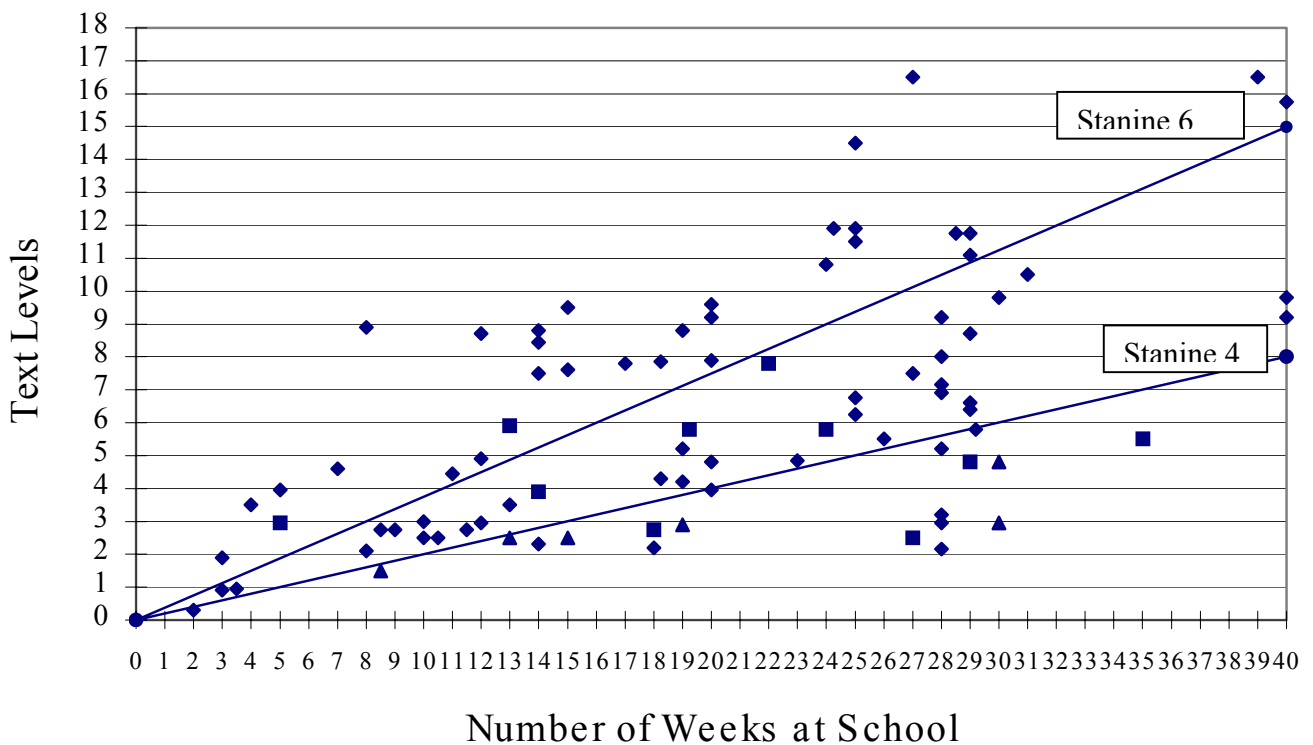


data points are hypothetical, but in the school's version, each point had a child's name beside it. The room numbers were colour-coded and characteristics of the children (attendance, non-English speaking background) were symbol coded.

**Figure 4.1**

**Example of Achievement Data in Meeting (Schools F and G)**

**Year One Reading Graph**



- ◆ Each child identified by name
- Non-English speaking background
- ▲ Irregular attendance

Children's Classrooms were colour coded



The data were discussed in this form in the two schools because in their earlier participation in the professional development, this form of data presentation and the uses to which it could be put, was introduced by the professional development contractor and discussed with the literacy leaders. Sessions in later years used a different form of data collation that was not as readily benchmarked against national averages. No school used this latter form in their meetings.

### **Meeting Analysis – Dialogical Features**

To further understand why this pattern of non-dialogical features may impact on achievement, we turn to our coding of the dialogue at the meetings. The full coding schedule is detailed in Appendix Two. The broader categories used for the summary presented in this chapter, in Table 4.3 and Figures 4.2 and 4.3, comprise the percentage of time spent in particular type of activities.

The categories selected for Table 4.3 include most of the categories of activities observed. School B has only 67.9% of its activities included in this analysis because 16.9% of the second meeting was spent planning observations, particularly individual timetables. No other school spent time in this activity so we did not include it in the table.

An additional category that is noteworthy for its absence is the category “Distractors”. This category included anecdotes that were unrelated to the issue being discussed, unrelated complaints and the like. The only use of this coding was 3.3% for School F and 2% for School B. All meetings were on-task in that they related directly to the topic at hand.



**Table 4.3****Percentage of Meeting Time Spent in Different Activities**

School	Non-teaching related	Unrelated to achievement data		Related to achievement data		
	External or school organisational	Neutral & positive descriptions of programmes	Self- identified problems and solutions	Neutral & positive descriptions of data	Problems & solutions not specific to teacher	Problems & solutions specific to teacher
A	3.1	<b>78.7</b>	17.8	0	1.0	0
B	15.3	18.1	<b>21.1</b>	2.5	2.8	0
C	0	<b>95.4</b>	3.6	0	0	0
D	11.1	1.3	5.7	<b>26.8</b>	0	3.0
E	9.6	2.9	<b>45.3</b>	5.5	<b>22.0</b>	1.7
F	3.7	0	0	6.5	0	<b>72.6</b>
G	6.9	4.1	15.4	9.5	13.8	<b>46.4</b>

Note.

Column 2 combines codes A.3.b, A.3.c.i, A.4.b, B.4.c, B.5.e

Column 3 combines codes B.1, B.2

Column 4 combines codes B.4.a.i, B.5.a, B.5.b.i

Column 5 combines codes A.2.a, A.2.b

Column 6 combines codes A.3.d.i, A.4.c.i

Column 7 combines codes A.3.d.ii, A.4.c.i

What is most noticeable about Table 4.3 is that the two Group Three schools spent most of their time discussing problems and solutions specific to teachers and the children they teach that arose from the achievement data. No other category was particularly favoured by the other groupings of schools. The two schools in Group One spent most of their time in either neutral or positive descriptions of programmes (School A) or discussion of self-identified problems and solutions (School B). In School A, the teachers were describing the writing programme and how it should be implemented.

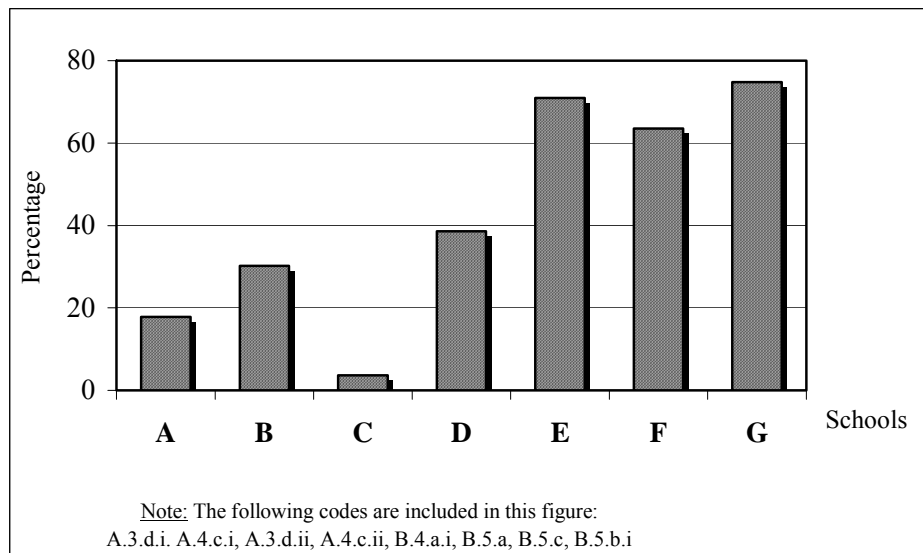


The Group Two schools spent the main proportion of their time in either of these two activities (Schools C and E), or in neutral or positive descriptions of the achievement data (School D). This last activity in School D is understandable because they were examining their achievement data for the first time in this meeting.

The discriminating code for the Group Three schools was not the percentage of time spent discussing teaching problems and solutions, but rather the percentage of time spent discussing specific problems that arose from teaching particular students who were not achieving at national averages. Others spent time discussing general problems and their solutions. These problems typically involved those they experienced when implementing the programme, or describing rather than evaluating their practice. This attention to discussing problems and solutions evident in the teacher-specific achievement data is further illustrated in Figures 4.2 and 4.3.

**Figure 4.2**

**Percentage of Time Spent Discussing Teaching Problems and Solution (includes General Problems, Teacher-Specific Problems and Problems Arising from Achievement Information)**



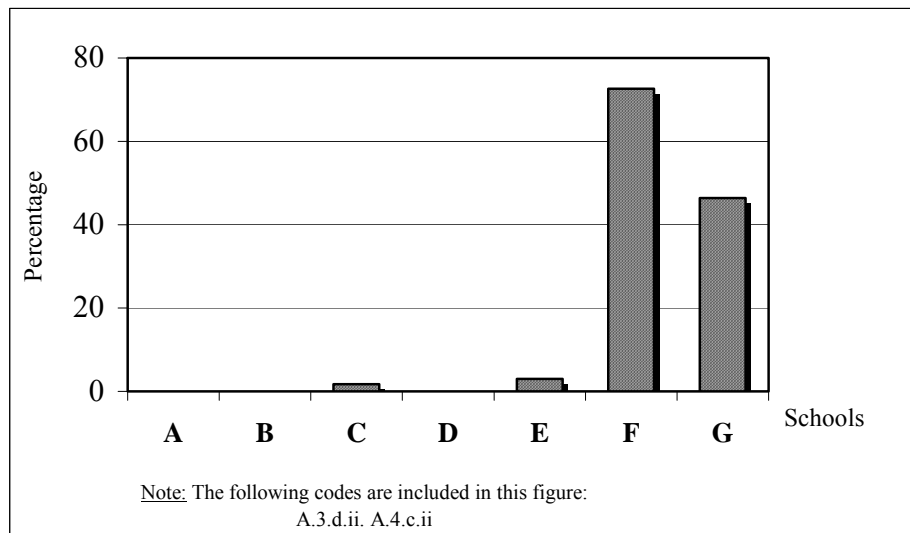
In Figure 4.2, we have included all codings relating to discussing problems and solutions. While these were high for the Group Three schools, others also engaged in this type of dialogue. However, the pattern is very different when looking at the percentage of time



spent discussing teacher-specific problems that were identified in the data. These results are presented in Figure 4.3. The percentage of time spent in this activity was much higher for the Group Three schools.

**Figure 4.3**

**Percentage of Time Spent Discussing Teacher-specific Problems and Solutions that Arose From the Achievement Information**



The discussion in the Group Three schools was also different in their quality, in terms of the matter-of-fact way in which potentially highly emotive issues were discussed and the urgency attributed to solving problems and making improvements. The literacy leader's opening lines of meetings in four schools illustrate this difference.

The literacy leader at School F began the meeting like this:

*"I will give you back your own data individually and then maybe if we could have a talk about some of the individual children and the problems that may be occurring."*

At School G, the meeting had been postponed for a week. The literacy leader began the meeting with a sense of urgency about the data analysis and teaching implications.



*“We had to postpone the meeting until today but I have made the graph available to some of you already ... instead of waiting until today because it would have meant that we lost a few valuable days if we waited until today to action this tomorrow. So I have said to some of you to have a look at it and see if we can make some improvement to our teaching, and some of you have.”*

In contrast, others were less focused or urgent. For example, the School E literacy leader began the meeting:

*“OK, so what we thought we’d do for this meeting, just to remind ourselves, we’re going to go through and just list how we start off [the reading lessons], what are the key things we say, what are the key things to look for and see how far we get tonight. So who’d like to go?”*

The literacy leader at School B began the meeting like this:

*“What we’re going to do today is I just wanted to just very quickly go through the latest bit of data – I’ve given you a copy but I know it’s a paper war and just have a look at it today and if you don’t want it just give it back to me. You don’t have to file it or anything like that at this stage ... it’s just hand-written.”*

The meetings at Schools F and G continued in a similar vein as the opening statements. Problems were discussed and teachers were expected to speak about their students with a high level of analytical knowledge. In contrast, at other schools where achievement data were available the discussion was indirect, with messages about teaching / learning and achievement embedded among others.

As an example, the literacy leader at School F systematically worked through the children who had not reached the national average in text level.

*Literacy leader: The only one in your class is your little gem Patrick.*

*Teacher: He sort of has meaning and the one-to-one, sometimes it is there, sometimes it’s not. Sometimes he is with it and sometimes he is not ...*

*Literacy leader: What does the running record come out with, the item analysis, is there any particular strategy that is coming through more than any of the*



*others? Is he using any meaning at all?*

*Teacher: Yes he is, you know if it was those easy books like the one sentence ones like “I am singing” or “Look at Mum she is...” He is saying what is happening but he doesn’t know “look” or he doesn’t know “at”.*

As at School F, the literacy leader at School G was systematically discussing each child identified as below the national average.

*Teacher: I think those two are finding it hard with the level I had them on last time because they were on Level 9 so I put them down to Level 6 or lower than 6. Just up and down on those levels because I don’t know what to do with them now I’m having trouble with...*

*Literacy leader: So you are asking for help?*

*Teacher: Yes.*

*Literacy leader: Do you want someone to observe you taking the book, or do you want to observe somebody [teaching], or do you want someone to look at the reading strategies in the whole process?*

*Teacher: Maybe how I can help these two children with their book...*

*Literacy leader: OK, so we need some help for you. Be thinking team about the kind of help that we may be able to offer.*

In contrast, those in other schools that talked about achievement data did so in ways that did not identify a particular teacher and / or embedded teaching / learning problems in other concerns.

The literacy leader at School B had called the meeting to discuss reasons for the children’s achievement falling in the second half of the year. Her particular concern was that the teachers were no longer implementing the approach to literacy as well as they had and were drifting away from its central principles.

*“I’ve put some of the reasons why [the achievement was declining] – and I’m really, at this stage just looking at why are there still such a large percentage of children under average. The most obvious one is the large classes in Term Four*



*and Term Three, that we finished the professional development in July and weren't given that intensive fortnightly burst of keeping us on track all the time. ... I wasn't monitoring as closely in the second half of the year as I was in the first half of the year. We had all those timetable things and a million others. Teachers moving away from the programme because it was sort of an experimental time and we wanted to just try other things and get new ideas from different courses and things and putting those into the literacy sessions. I added parents in there. I don't know whether you agree with that or not. But maybe parents being unsure of how to support what we were doing at school back at home still. Absences is another good one. Can anybody think of any other reasons why it might be happening?"*

Those schools that did not have achievement information available usually talked generally about programme implementation and associated issues. For example, one teacher at School E was concerned that when she acted in accordance with what was taught in the professional development she was pushing the children too fast through the text levels.

*Teacher 1: What I'm wondering is, am I sort of giving them [the children] this high level and they're not ready for it .... What worries me about those children is that they can read fast but I have a feeling that there are other areas that they should have learned before they go on and on, because I've got children who can read – their word attack skills are really really good but when you ask those questions we have done at the course, like, "Can you read it again and think", and the children are progressing well ... But when you ask the questions and they just don't answer you. You know they need to understand.*

*Teacher 2: Otherwise you'll be ending up telling them all the time.*

*Teacher 1: Yes.*

*Teacher 2: But I suppose you have to move on because if you don't help, you'll be sitting there all day.*





*Literacy leader: At the beginning it was really quite powerful – she [the professional development trainer] talked so much about getting the words to create that shared understanding. Are we sticking too much to her words and should we not be thinking about the words that best suit your children, that you are more comfortable with? Do you think we need to come to a point where we actually choose what to say.*

*Teacher 1: I think so because sometimes you sit there and think, “Oh gosh”.*

The percentage of written comments by the staff in School A related to specific teaching strategies were similar in pattern to those of the lower achieving schools. Despite the request by the principal for teachers to identify how teachers would try to move children’s reading progress over the next term, only 17% of the listed comments related to specific teaching strategies and these were relatively non-specific, such as more group time, more word work.

### **Interview Analysis**

Much of the information about the frequency of meetings and how teachers experienced them was gained from interviews with the literacy leaders and the teachers. Additional questions were asked also about process and teachers’ attitudes towards the use of achievement data.

### **Use of Achievement Information**

All teachers collected and recorded reading levels at least once per term. Most teachers also collected additional information at regular intervals. The data collected and recorded by the teachers are listed in Table 4.4.

Information concerning children’s text levels was collected by each literacy leader and collated in the various forms that are also summarised in Table 4.4. Group Three schools collated the data by both class and year level in ways that allowed for clear comparison with national benchmarks as did School B but the data were available only on the computer. They were not made public. Schools A and E collated the data by class only and the data were not benchmarked. School D did not collate the data in the first year following the professional development but did so in the second year. Finally School C



intended to introduce a collation system but had not done so at the time of the research. All teachers in the schools that collated achievement data reported that they had seen these data.

Teachers' understanding of the purpose of these records and what actions had followed from them were similar within each school but different between the schools and are also summarised in Table 4.4. Predictably, the teachers' responses in Group Three schools about the purpose of the data were to improve teaching and learning. The predominant comment from others was that collated records were for management not for the teachers themselves. Interestingly, School B teachers reported that they enjoyed seeing their own class data when they looked it up on the computer because it allowed them to see how well their children were progressing and they found it motivating to continue with this approach to literacy.



**Table 4.4**  
**Interview Analysis of Teachers' Responses about the Collection and Use of Achievement Information**

	School A	School B	School C	School D	School E	School F	School G
<b>Achievement data collected and recorded</b>	Running records of reading levels, words known and letter identification.	Running records of reading levels.	Running records of reading levels	Running records of reading levels, strategies used	Running records	Reading levels, no. of words known, alphabet	Reading levels, alphabet, high frequency word sample
<b>Records collated</b>	Class only. No benchmarks.	Class and year reading levels compared with national benchmarks. Class levels not public.	Not collated	Class only. No benchmarks. Year 3 collated data with benchmarks but not related to class data.	Year 2 – not collated. Year 3 – text levels collated by class. No benchmarks.	Class and year reading levels compared with national benchmarks	Class and year reading levels compared with national benchmarks
<b>Teachers' explanation of purpose of collated records</b>	Planning. Identification of special needs children for literacy leader reading group.	How well the children are progressing.	NA	Collated for management	Year 2 -Collected for management Year 3 – collected to determine children's progress.	To watch progress and identify those in need of help	To learn about teaching programme
<b>Reported subsequent actions</b>	Literacy leader takes special needs children.	Motivating to continue.	NA	Mixed responses including “nothing”, and “following up slow progress children”.	Year One – NA Year Two – focused on teaching implications	Changes in way teach.	Reviews teaching strategies



The qualitative differences in the teachers' responses are difficult to capture in a summary table, such as that of Table 4.4, but can be illustrated by quotes from the teachers. At School F, for example, one teacher responded to a question about the use of data as follows:

*Interviewer: And when you looked at it [the data], what did it mean for you as a teacher?*

*Teacher: I would sort of think, "Oh what am I doing wrong here?", or "What has worked with these children and why hasn't it worked with other children?" I was always evaluating whether I could have done more, or could have done better, especially with my lower groups. You always constantly look at them and think, "I am sure I can do something else with them to try and push them along further."*

When asked about the sharing of the data in meetings, she responded,

*"We don't look at each other and say, 'Oh gosh, look at yours, Oh no, look at mine'. Not that sort of thing. We just talk about where we were and it made us think, 'What am I doing? What can I do better?' It just keeps you focused on what you should be doing."*

A second teacher at School F responded in the following way when asked about the way in which achievement information was used in the school.

*Teacher: [The AP] maps them for us and we can see who is falling behind which is good. With my lowest group I see them four times a week and try to push them up. You can see who is struggling and depending on how long they've been at school to where they should be and where they are at. And you can see where you have to close the gap. So it's good and we talk about that.*

*Interviewer: Are you saying that when you see a group is below average, that provides the motivation to push them up?*

*Teacher: Yes, because you don't want any of them to be below.*



*Interviewer: I was wondering where the motivation came from. Is it from the others who know those children are below?*

*Teacher: No, you just want them to do well. You don't want them to come out of your class not equipped to go to the next year.*

A recently arrived teacher at School G compared her School G experiences with those in the school she had taught the previous year.

*"As a team, we look at ourselves far more I think here, because I mean I have experience of teaching in junior levels at the other schools. We did look at the children's data but we never looked at ourselves. This time we had to look at the way we were doing things and we were supporting each other. If I have problems with a particular child in my reading group, I can ask a colleague to have a look at what I'm doing or take a running record and we can have a look together at the processes the child uses."*

In contrast, the teachers at School B where the children were not achieving so well, but individual teacher's data were not discussed, responded quite differently to the achievement data. One teacher responded very positively, even though achievement was low;

*"I think it's a buzz. It gives you a lift maybe to know that's still going. I think it's a support thing and you can listen to how everyone's thinking.... I feel I'm doing quite well with my children."*

A second teacher said,

*Teacher: I think the data is fascinating because it's evidence of the hard work that you put in. It's evidence of what the kids are being able to take out of the work that you've put in and it's evidence of where you need to go from where you are at. I mean it certainly tells you where you are. You're not wondering. You're not lost, you're not guessing.*

*Researcher: Is there anything in that data that has said to you, "I should do something differently?"*



*Teacher: If I see a group who is supposed to be a five or six and they're beyond that, I give myself a pat on the back and say, "This is going to be a good strong reading group of children and they're going to get a lot out of their reading at school." If I see a group that's under it, I panic a little bit and I think, all right, "What do I look at?" and the first thing that I look at is the choice of books.*

The changes in thinking in School E over the two years were evident in their statements about the usefulness of achievement data. In Year Two, the teachers had not systematically examined the data, but in Year Three were doing so for a project they were conducting on their writing programme. These changes in attitude are reflected in the following quotes:

Year Two:

*Teacher One: I'm not sure that running records are the best way to assess the children. They are not being used as a diagnostic tool. I don't see why running records are really essential when they're just basically for keeping records to see for ERO comes in to check to see what level the children in your class are at but for me personally, no.*

*Teacher Two: I've learnt that the children are really happy and learning at school. They are more confident, respectful, becoming independent and doing what they want to do. Communicating in the classroom and outside, with their behaviour – that's all part of being confident.*

Year Three:

*Teacher One: I am looking at this level and am forever comparing it with my graph and seeing how I am supposed to get this lot to level fifteen when they turn six and is there anything else that I can do.*

*Teacher Two: I look back and see how that child had started and what I have done to make that person move up. So with teaching and planning for the other children that are not very successful, I'm trying to do the same thing to*



*see if it works.*

At this school, the achievement profile for the two years was very different. Little progress had been made over baseline levels in improving student achievement during Year Two, but it improved dramatically in Year Three. This improvement coincided with the time the teachers began to critically analyse achievement information and discuss its meaning for teaching practice.

### **Attitudes Towards the Use of Achievement Data**

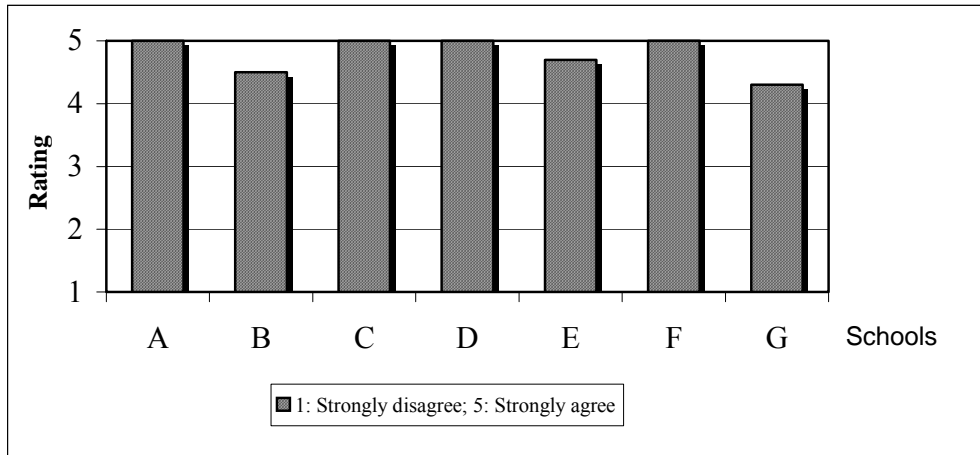
No teacher spontaneously mentioned concerns about the use of achievement data during any of the interviews. However, we specifically checked if concerns overshadowed usefulness and if these differed among the schools by asking for ratings of agreement with two statements about the importance of achievement data in improving teaching and learning and concerns about negative uses in the second interview.

The average ratings given by the teachers at each school for the importance of data are presented in Figure 4.4. All schools' ratings for the importance of data were similar. However, as shown in Figure 4.5, there was more variation in the concerns about negative uses, with those schools using data to the greatest extent (Group Three) expressing the least concern.



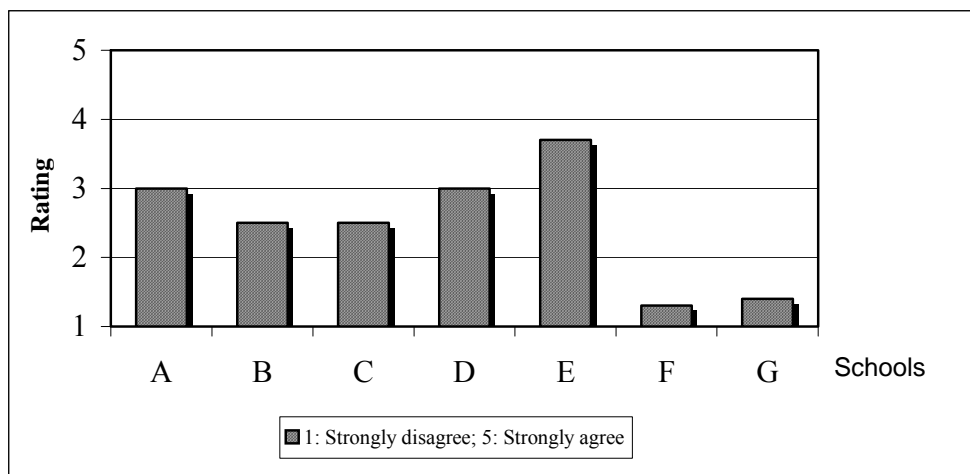
**Figure 4.4**

**Average Ratings for the Importance of Data in Teaching**



**Figure 4.5**

**Average Ratings for Concerns about Negative Use**



The interviewer did not give a definition of “negative uses” so that teachers could express their concerns as they perceived them. Those who gave the most negative ratings were concerned about negative judgements of teachers or children, or potential pressure to change teaching programmes. For example, one teacher from School A said,

*“Yes I do [have concerns] because the data does not actually give any reasons for it and sometimes you get something where someone is just not moving and could say you’re not doing your job properly. In actual fact, you’re probably doing very well with that particular child because of what they came in with.”*





Another from School C gave a similar reason: *“I think that it could be possibly used in a negative way as a threat to the teacher, I don’t think it especially has been in my case, but it is possible.”*

Another teacher at School B was concerned about the potential implications for teaching practice. She said, *“A negative way is if you are asked to change.”*

An answer more focused on children by a teacher in School C was: *“Some people may look at it and think negatively. You’ve got to look at the underlying child, each individual child and find out what’s causing what.”*

In contrast, one teacher at School F questioned the interviewer when she read out the statement about negative uses:

Teacher: *How, what do you mean?*

Interviewer: *It’s up to you to interpret it.*

Teacher: *I don’t know how it could be used in negative ways.*

Our search for the words “accountable” and “accountability” in the transcript appeared only three times, indicating that issues of accountability were not particularly strong for these teachers. Two of these occurrences were in Schools F and G. Their accountability, however, was for making sure they had sought assistance when children were not achieving well. As one teacher in School G explained,

*“I asked [the senior teacher] to come in and watch. Two girls, for two or three weeks I couldn’t get them to read. They’d just sit there and look at me. I knew she [the senior teacher] would come and say, ‘Why aren’t these children moving up?’ ... You’re always accountable for why they’re not reading, so I said to [the senior teacher] ‘Well I can’t shift them, maybe you should try’ and she came.”*

## **Observations and In-class Support**

In both Phase One and Two interviews, we asked about peer and senior teacher observations and how the teachers experienced these observations when they occurred.



Peer observations were rare, so we have not included them in our analysis. Table 4.5 summarises which schools had senior teacher observations based on achievement information, and which had observations independent of this information.



**Table 4.5****Literacy Leaders' Observations of Teaching**

School	Senior teacher observation arising from teacher-specific achievement information	Senior teacher observation – based on programme implementation
A	No	No
B	No	Yes
C	No	Yes
D	No	No
E	No	No
F	Yes	Yes
G	Yes	Yes

Not surprisingly, observations based on teacher-specific achievement data occurred in the Group Three schools. These observations were a regular part of the senior teacher's responsibilities. As the literacy leader at School F explained, she undertook both formal and informal observations.

*“What I would normally do is if I am doing an assessment or when the graphs are being done, just go in and observe what the teachers are doing at the different levels – that we are on track for the different levels; it is not a formal written observation, it is informal as a peer discussion between teachers and myself.”*

However, she also undertook the formal observations four times per year and these were described very differently.

*“When I am observing them it is with very specific objectives that we are looking at. For example, that they are following pathways, looking at the word work and the development, where they intend to go in the next stages and looking at the proper analyses of their records and how that information is used.”*



A recently observed teacher confirmed what happened:

*Interviewer: Does [the senior teacher] come and watch you?*

*Teacher: Yes she does and she seems to think I am doing the right thing. But sometimes I feel like I'm not covering all the bases.*

*Interviewer: Do you find those visits helpful?*

*Teacher: Yes ... she gives me some good suggestions on what I can do and what I can focus on. Sometimes she just says to me, "Look, they are not going to catch on as quickly as you think they are going to."*

A teacher at School F explained how she found that the most challenging part of being observed was the senior teacher inquiring about her reasons for doing something. She described it in the following way:

*"When somebody asks you a question of 'Why did you do that?' and you've actually got to think to yourself, 'Why did I do that? What was it at that time that made me bring that particular aspect out?'"*

Literacy leaders at other schools also undertook observations. The main reasons for School B's observations, as expressed by the senior teacher, was to ensure consistency in all classes in programme delivery. One teacher expressed how the observations kept her on track, but she felt somewhat ambivalent about them.

*Teacher: I think if the school didn't monitor it, it wouldn't happen. I mean you would lose it so you do need the upper management.*

*Researcher: Can you tell me more about the effect the observations have on you?*

*Teacher: It means you don't lose it I suppose and revert ...*

*Researcher: What do you think you would be doing now in your reading programme if it wasn't being monitored?*

*Teacher: Probably do the same but I think I've kept the cues a bit tighter and I sort of think about – I sort of revisit it.*

*Researcher: Do you find monitoring negative in any way?*

*Teacher: It can be sometimes, yes.*

*Researcher: Can you tell me about that?*



*Teacher: All the negative part would be if so and so is doing something a certain way or so and so might be doing better, it can put you off, but maybe not so much with my reading because I feel I'm doing quite well, but I think the pressure – it's like peer pressure isn't it – in teacher .... I felt a bit negative I suppose about the writing because I still don't totally believe in some of it ....*

Another teacher at School B felt that the observations were undermining of her professionalism:

*"I think it's a lack of information and a lack of value for what is happening in a classroom doesn't come across.... Well, they say to me, 'I want to come in and observe your reading programme because you're doing some things that aren't part of the ECPL programme and really aren't necessary.' They may not be part of the programme."*

The literacy leader at School C observed more informally in that she taught groups in the teachers' classrooms at the same time as they were teaching, and so was able to make suggestions when she perceived that they were needed. As she explained,

*"While I'm there, I'll make comments like, 'Some children need to be passed through to me'. When I get them and I say [to the child], 'Locate the word, make it with the letters'. I can see that they're not quite as quick at it as the way I teach and so I can pick that up and then I'll go back [to the teacher] and just talk with the teacher and say, 'Are you sure you're using the white boards and the magnetic letters? They don't seem to be very up on that?' So there's that sort of observation."*

The teachers were positive about these observations in School C and expressed that the literacy leader's presence in the room was helpful: *"I guess she's been observing all the time because she's been in the room with me. We've actually been watching each other in a way and we're sort of bouncing ideas off each other which has been good."*

By focusing the observations on solving problems with achievement in the Group Three schools the observations were welcomed rather than resented by the teachers. Issues of



“correct” programme implementation were not relevant, rather they were an opportunity for the teachers to learn. Achievement problems and their solutions provided the rationale for the observation. However, in the absence of achievement data, as in School B, the observations were perceived to be about compliance and the teachers reacted more negatively.

## **Conclusions**

Those schools, where the in-school processes were based on the analysis of benchmarked, class-specific achievement data, had the highest student achievement. This focus was not perceived as a heavy-handed accountability system by any of the teachers involved, but rather as a commitment to learning how to teach more effectively. This commitment was evident in both the meetings and the interview comments. It is not the presence or absence of achievement data per se that appeared to make the difference, but the learning orientation that the teachers in the Group Three schools adopted when examining the data. The pervading question was always, “How can we do this better so we can raise student achievement?” with the effectiveness of their efforts tested against that achievement. In contrast, the teachers in the other schools did not perceive the achievement data to be related directly to their practice in terms of changing that practice.

The learning communities established in Schools F and G fitted with the variables distinctive of and critical to a strong professional community (Louis, Kruss et al., 1996). Teachers had shared norms that their children could and should be at national levels of achievement, the focus was constantly on student learning and teachers talked about and reflected on their professional practice. Practice was deprivatised in the sense that the achievement data was available for all to see, with the dialogue among the teachers based on that data.



## CHAPTER FIVE

### PROFESSIONALISM, COMMITMENT, AUTONOMY AND ACHIEVEMENT

*“I think the principal’s role has changed over the last few years. I guess I see myself as the captain of the ship. My job is to get the ship from port to port and have a pretty good idea about what is happening below decks and everything. Other people make the engines go and other people put the food on the table and those are the people like [the assistant principal] who are in charge of the engines. My role I think in all of these things is to know what it is all about. To give encouragement for it and to affirm things when they show success and to affirm it with all the people who are concerned with it and try to share that success too, so that other people want to do it.... It is to know what is going on and to be able to make those slight course adjustments, but you still get to the port.”*

Principal, School E

In this chapter we examine how “the port” is defined and the implications of this definition for being considered professional. The findings in the previous chapter and the processes associated with the schools that were most successful in promoting student achievement have implications for our traditional views of professionalism. Typically, definitions of professionalism have encompassed three key features: a specialised knowledge base, a strong service ethic with a commitment to meeting clients’ needs, and the capacity to self-regulate or act autonomously (Hargreaves & Goodson, 1996). While these qualities may be seen as the ideal, they are rarely realised in practice and what it means to be “professional” is more usefully treated as a social construction which changes according to time, place, and social circumstance (Locke, 2001). One of these changes over the last 15 years is the way in which management structures and expectations have become more evident in schools. Some claim that these changes have resulted in a “deprofessionalisation” of the teaching workforce because teachers perceive



that they are now required to meet goals defined by others, to engage in technical management of student and curricula and are held publicly accountable (Locke, 2001; Sachs, 1997). A recent survey of English teachers in New Zealand secondary schools, for example, showed that many teachers considered that the introduction of new curricula reforms and governance structures had led to their “deprofessionalisation” (Locke, 2001).

What these traditional conceptions of professionalism typically do not address is how to bring about change in situations, such as in Mangere and Otara, where the recipients of the education offered perceive that change is needed. Preserving teacher autonomy and accepting altruism as a given has not been successful. On the other hand, initiatives in the United States to “teacher-proof” the curriculum in an effort to bring about change have consistently failed (Apple, 1990). In this chapter, we examine the implications of our findings for what it might mean to be professional in situations where change is needed if the teaching workforce is to realise the aspirations of the community for their children’s education. We suggest that the promotion of data-based inquiry into the effectiveness of the teaching in the ways undertaken in Schools F and G is most likely to achieve this outcome.

### **Data-based Inquiry**

As outlined in the introduction, traditional professional development conceptualises teachers as knowledge recipients, so that teacher training and professional development is focused on acquiring *knowledge-for-practice* (Cochran-Smith & Lytle, 1999). This conceptualisation is evident when admitting newcomers to the profession, who typically are required to demonstrate sufficient mastery of a specialised knowledge base, together with the skills to apply it. Part of the expectation associated with being professional in this model is that the teachers will translate, use and adapt what they have learned of the knowledge base when circumstances require. The need for commitment and altruism is immediately obvious because programme adaptations need to serve the best interests of students. However, as outlined in Chapter One, success on any evaluation criterion for this approach to professionalism and professional development has been elusive (Hargreaves, 1995).





Some of the problems embedded in the *knowledge-for-practice* approach to teacher learning can be addressed by adopting an alternative approach that Cochran-Smith and Lytle (1999) have called *knowledge-in-practice*. This approach signifies the shift of emphasis in professional development away from individuals and discrete courses to systemic, complex understandings of the ways in which learning is socially situated, created, mediated and shared within communities of practice. The distinguishing feature of this approach is that teachers are thought to learn when they reflect, with others, on the experiences of their classroom life. This reflection allows them, when acting and thinking in the immediacy of classroom life, to draw on their previous experiences, actions, and reflections.

However, the knowledge-in-practice is not without its difficulties, because it does not define what should be reflected on. Eraut (1995) argues educational practitioners are professional practitioners only when they hold themselves accountable for the moral dimensions of the teaching profession, and have the capacity to reflect on and improve their practices in relation to these dimensions. Specifically, reflective practitioners have (1) a moral-commitment to serve the interests of students by reflecting on their well-being and their progress and deciding how best it can be fostered or promoted; (2) a professional obligation to review periodically the nature and effectiveness of his or her practice in order to improve the quality of one's management, pedagogy and decision making; and (3) a professional obligation to continue to develop his or her practical knowledge both by personal reflection and through interaction with others. It is these inquiry-based accountability processes that distinguish this view from the others and has been labelled by Cochran-Smith and Lytle as *knowledge-of-practice*.

Norlander-Case, Reagan, and Case (1999) suggest that we may have unwittingly contributed to our own difficulties in developing these reflection / accountability process by arguing so vehemently for the professionalisation of teaching with a primary emphasis on the criterion of a specialised knowledge base. The emphasis has led reformers to believe that we can enhance professionalism by carefully identifying, prescribing and measuring technical knowledge rather than engaging in data-based inquiry into the worth of that knowledge in promoting student welfare and learning.

The *knowledge-of-practice* approach assumes that the knowledge that teachers need to teach well is created or re-created when teachers adopt an inquiry stance and treat their own classrooms and schools as sites for intentional investigation. Teachers learn, in this



sense, when they generate local knowledge of practice by working within the contexts of inquiry communities to theorise and construct their work and to connect it to larger social, cultural, and political issues. This inquiry stance challenges their assumptions, identifies salient issues of practice and poses problems.

Consistent with this view, is an argument put forward by Glickman that “It is irresponsible for a school to mobilise, initiate, and act without any conscious way of determining whether such expenditure of time and energy is having a desirable effect” (Glickman, 1993, pp. 54–55). Teachers, however, are unable to undertake this on their own, nor is it desirable that they should do so. For inquiry-based learning to occur, the whole school needs to become a centre of inquiry (Schaefer, 1967), where staff continuously examine and improve teaching and learning (Joyce & Calhoun, 1995).

## **Leadership Challenges**

The leadership challenges involved in developing this inquiry stance are considerable and traditional research into leadership styles does little to help us in this pursuit. Having a collaborative style, or being a good communicator, does not tell us what to be communicative or collaborative about. In an inquiry model, these processes must be tested against criteria of effectiveness in making progress on worthwhile goals. Leaders, as well as their teachers, must become data-based learners.

Leaders also need to provide the conditions that foster inquiry as part of teachers’ practice. Teachers need the opportunities to acquire the requisite skills and knowledge, the conditions for risks to be taken and mistakes made, and most importantly, the data-based challenges to their practice. They also need sufficient autonomy to adjust their practice to meet the needs of their students, but student learning is more likely to be enhanced if this autonomy is exercised within the constraints of accountability for promoting that learning. Developing accountability systems that serve student and professional learning is possibly one of the greatest challenges for leaders.

Accountability has become associated with the acts of politicians and policy makers to ensure that schools fulfil their roles to deliver a particular level of education. However, the most effective accountability, and the one to which we refer in this report, is the internal accountability system within the school, for it is this that impacts directly on



student achievement (Newmann et al., 1997). The high-performing schools in Newman et al.'s study were able to identify clear standards for student performance, collect and review information to inform themselves about their levels of success, and exert strong peer pressure among the staff to meet the goals. Teachers base teaching decisions on data rather than on beliefs and assumptions about what is effective.

The leadership tasks involved in establishing these kinds of systems are obvious but complex. Effective organisation of resources appears to be a necessary condition for teachers to engage in data-based inquiry. However, good organisation on its own is insufficient, because it requires the resources of the school to be re-orientated to providing the conditions that facilitate both management and staff to acquire the skills to learn interactively and experimentally and to be internally accountable. These skills embrace both the technical aspects and interpersonal challenges that inevitably arise.

In this chapter, we examine both the traditional professional values of commitment and autonomy, and the inquiry-based model of using achievement information in the decisions of leaders and teachers in the seven schools, and relate these processes to the achievement data presented in Chapter Four. In making this contrast, we have selected four indicators:

- Reasons for the initial commitment to the professional development and levels of ongoing commitment
- Professional satisfaction with implementation and student achievement
- The data used to judge the success of implementation
- Beliefs about professional autonomy.

We conclude the chapter with a brief illustration of how commitment to improving achievement can form a touchstone against which other process decisions can be made.

## **Method**

The data for this chapter were obtained primarily from the interviews. Specific questions relevant to this chapter are listed below, with the rating scales, interviewees and phases to which they apply indicated in brackets.



## **Commitment**

- *Why did you decide to enter the contract?* (Principals and Literacy Leaders; Phase One)
- *Who attended the professional development?* (Principals and Literacy Leaders; Phase One)
- *Where would the successful introduction of these practices fit with your priorities this year?* (Rating scale 1–10 with 1 representing “low priority”, 10 representing “high priority”.) Please give reasons for your ratings. (All groups; Phases One and Two)

## **Professional Satisfaction**

- *How successful do you feel your Year One teachers are in implementing the ECPL approach to teaching literacy?* (7 point scale: 1 represents “Very successful”; 4 represents “Neither successful nor unsuccessful” and 7 represents “Very unsuccessful” with appropriate descriptors for the intervening numbers.) *Please give the reasons for your ratings.* (Principals, Literacy Leaders; Phase Two)
- *How successful do you feel you have been in implementing the ECPL approach to literacy? Please give the reasons for your rating.* (Teachers; Phase Two)
- *How satisfied are you with the achievement levels of the children in Year One this year?* (7 point scale: 1 represents “Very satisfied”; 4 represents “Neither satisfied nor dissatisfied” and 7 represents “Very dissatisfied” with appropriate descriptors for the intervening numbers.) *Please give reasons for your rating.* (Principals, Literacy Leaders; Phase Two)
- *How satisfied are you with the achievement levels of the children in your class this year?* (7 point scale: 1 represents “Very satisfied”; 4 represents “Neither satisfied nor dissatisfied” and 7 represents “Very dissatisfied” with appropriate descriptors for the intervening numbers.) *Please give reasons for your rating.* (Teachers; Phase Two)
- *Do you keep individual records on the Year Zero / One children’s reading achievement? If yes, Does the school collate these records?* (All groups; Phase One)
- *Have you read the ECPL report?* (Principals and Literacy Leaders; Phase Two)



- *Have you examined the Year One achievement data this year?* (Principals and Literacy Leaders; Phase Two)
- If the answer to No. 5 was “No”, the principal was asked, *“How would you judge the success of a programme?”*

### **Professional Autonomy**

- *Have you organised the roles and responsibilities differently for staff to implement this programme?* (Principals; Phase One)
- If the answer was “Yes” to No. 4, the respondent was asked, *“How have you organised them differently?”* (Principals; Phase One)
- *Some people believe that teachers should have all the say about how they teach the children in their class because they know the children best. Other people believe that the senior teachers should be able to tell the teachers how they should teach, such as in ways compatible with the ECPL professional development. In relation to the ECPL approach, how much say do you think the teachers should have in deciding what to teach the children in their class compared with the amount of say the senior teachers and management in the school should have?* (5 point rating scale: 1 represents “Teacher should have total say”, 2 represents “Teacher should have most say”, 3 represents “Teacher and management should have about half the say each”, 4 represents “Senior teachers and management should have the most say”, 5 represents “Senior teachers and management should have total say”.) (All groups; Phase Two)

## **Results**

The findings are presented for each of the four areas explored in this chapter: commitment, professional satisfaction, professional autonomy and using achievement as the touchstone for discussions and decision making.



## Commitment

In this section we examine two aspects of commitment in relation to the differential achievement of the children in the seven schools: initial commitment in the form of reasons for entering the contract, and ongoing commitment in the form of senior management attendance at the professional development (and ratings indicative of ongoing commitment).

**Reasons for Initial Commitment to the Professional Development.** The difference in the seven schools' focus on achievement and achievement information was evident from the beginning. We asked principals and literacy leaders at the beginning of their first interview why they decided to enter the professional development contract. We used the following two criteria when analysing their answers:

- Mention of dissatisfaction with reading levels
- Mention of knowledge of improved reading achievement established by research on the approach to teaching literacy by the methods covered in the professional development.

Failure to mention either of these elements did not mean that the principals were unaware or unconcerned about them, rather that these issues were not foremost in their minds when recalling their reasons for entering the contract. Table 5.1 indicates the presence or absence of these components in the principals' and Literacy Leaders answers.



**Table 5.1****Principals' and Literacy Leaders' Responses When Asked Why they Decided to Enter the Contract**

	Mention of dissatisfaction with current achievement	Mention of improved reading levels in research
School A		
Principal	No	No
School B		
Principal	No	No
AP	No	Yes
School C		
Principal	No	No
AP	No	Yes
School D		
Principal	No	No
DP	No	No
School E		
Principal	Yes	Yes
AP	Yes	Yes
School F		
Principal	Yes	Yes
AP	Yes	Yes
School G		
Principal	Yes	Yes
AP	Yes	Yes



Those principals who did not specifically mention achievement talked about the following reasons for their initial commitment:

- They were required to do so as part of the ECPL initiative and it seemed to fit with the current programme (School D)
- Any professional development on reading might be helpful and worth exploring (School C).
- The opportunity was available and sponsored by the Ministry of Education (School A)

In the feedback to the schools, the principal of School A noted that as one of the first schools to enter the contract they had very limited knowledge about the approach to teaching literacy. They had no expectations except that it was going to help address student reading levels because they could not obtain clear clarification about the training. The principal believed that this would be different from other schools who undertook the training in the following year.

As can be seen from Table 5.1, only the three schools with the highest student achievement included both elements in their answers.

**Ongoing Commitment and Student Achievement.** Frequently, the most important element to successful programme implementation is considered to be the commitment of those involved so we examined how each school's expressed commitment related to their student achievement levels. This ongoing commitment was measured in two different ways. Firstly, whether a senior member of staff attended the professional development. In all schools this was the case. In Schools A and G, the principals themselves attended. In the other schools it was the AP or DP responsible for Year One reading and in School D, the senior teacher for Year One children attended. Given the length of the course and its intensive nature, this attendance indicates a high level of commitment on the part of the senior management in all schools and did not discriminate among them.

Secondly, we asked principals, literacy leaders and teachers to rate the extent to which the successful introduction of the programme fitted with their priorities for the year. These results, presented in Figure 5.1, indicate that all schools (except School D) gave the programme high priority to its implementation. Schools D's ratings were, of course, influenced by the decision not to fully implement the programme. Similar results are presented in Chapter Four on motivation to fully implement the programme in Phase



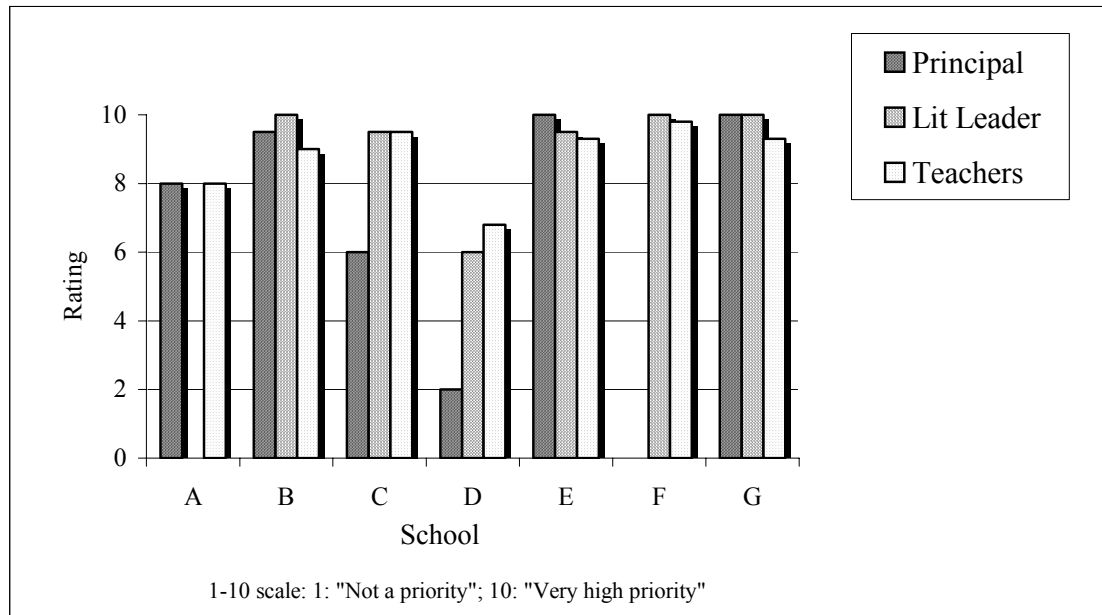


Two, indicating that, for six of the seven schools, motivation and commitment were ongoing.



**Figure 5.1**

**Priority Ratings of Principals, Literacy Leaders and Teachers (Mean) to Implement the Professional Development**



The measures of commitment reported in this section indicate that it is not commitment to a programme, per se, that makes the difference to student achievement, but rather commitment to implementing a programme with the express purpose of raising student achievement.

### **Professional Satisfaction**

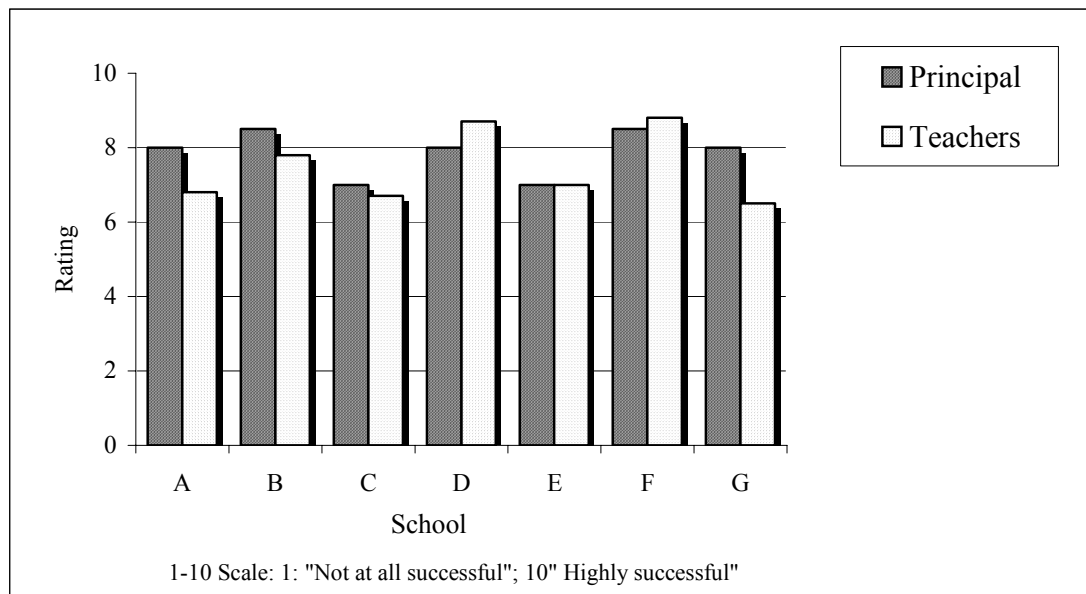
Two indicators of professional satisfaction were used. These included the participants' feelings of success in implementing the approach to literacy and their satisfaction with student achievement levels in the school and class.

**Success Ratings.** When asked to rate the feelings of success in implementing the programme, the participants' ratings bore no relationship to the students' achievement (see Figure 5.2). Ratings of 8 or above on the 10-point scale were evident in Schools B, D and F. Others' ratings averaged 7 or 8, indicating that most felt reasonably successful.



**Figure 5.2**

**Principals' and Teachers' Average Ratings for Feelings of Success in Implementing the Approach to Literacy Teaching**



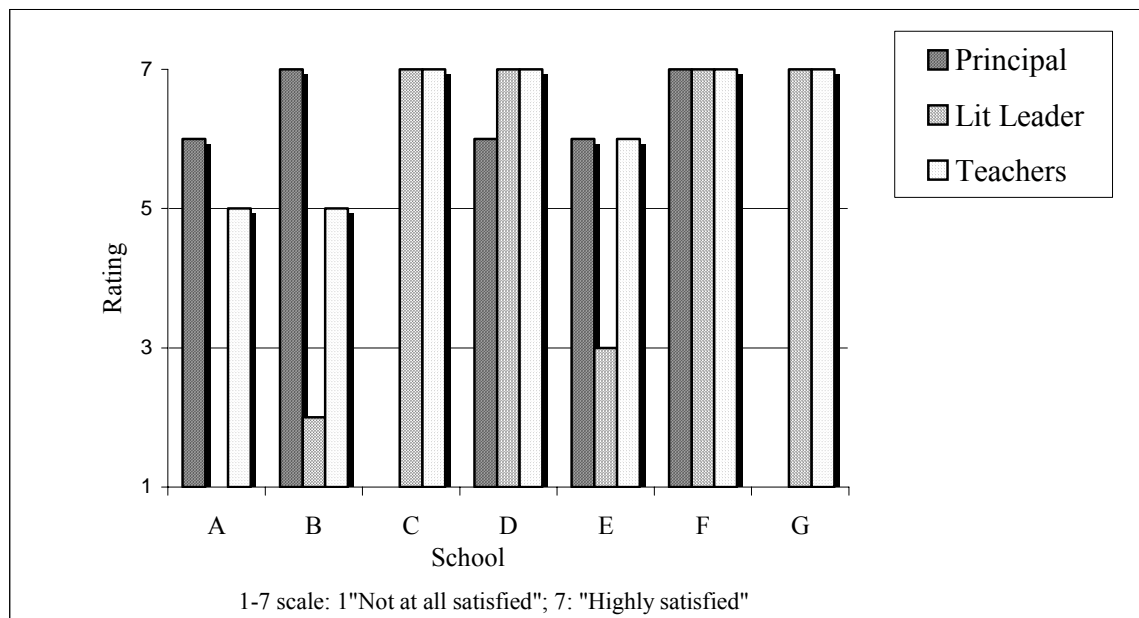
Although there was no relationship between ratings of success and actual achievement, 67% of the teachers mentioned children's achievement as reasons for giving these ratings. All the teachers at Schools A, F and G and at least one teacher in the other schools included reference to children's achievement in their reasons. Typical comments were: *"The children are definitely making better progress than they have in previous years"* (School A), and *"The children are reading to a high level faster"* (School C). These responses contrasted with the reasons given by both teachers at School F and one of the teachers at School G who were more circumspect in their success ratings. For example, one School G teacher said, *"I've given a rating of 6 because I'm not sure what to do when children get above level 10."* The teacher in School F responded to the question by saying, *"Sometimes I feel I'm not getting anywhere with my programme but when I see the results ... I was quite surprised, the children are doing better than I thought."*



**Satisfaction with Student Achievement.** There was also little relationship between principals' and teachers' ratings of satisfaction with achievement and actual achievement (see Figure 5.3). When principals and teachers were asked to rate their satisfaction with the achievement levels of the children in their school or class this year, their ratings bore little relationship to actual levels of achievement. The literacy leaders' ratings were more closely related to the achievement ratings, in that the literacy leader in School B, who had analysed the achievement data, gave a more data-based rating than her principal.

**Figure 5.3**

**Principals', Literacy Leaders' and Teachers' Average Ratings of Satisfaction with Student Achievement**



A problem for many of the teachers in making these ratings was that few had comparative benchmarked data on which to base them. Although all recorded individual student achievement levels at least once a term, and these were collated in schools B, D, F and G, only the teachers in School F and G had both their class-specific and benchmarked year level achievement data available for ready comparison. Similar problems existed for the principals in that there were no area-wide achievement data with which to compare their school's success. Their only benchmark was a national one. However, no principal mentioned this as a difficulty in their interviews.



Area-wide achievement information became available in the second year in a report sent to six of the seven schools on the implementation of the approach to teaching literacy (Phillips et al., 2001). This report presented information on a random sample of students of all the teachers involved in the professional development. When interviewed approximately two months after the release of a draft of this report, only School A's principal had read it and she indicated that she had not used it in her own school. Most principals reported that they found its technical nature and length (208 pages) too daunting.

In the seven schools, only three principals (Schools A, F and G) had seen achievement data for the Year One students and two of these principals (Schools A and G) were actively involved in their analysis. All others had access to the nationally benchmarked six-year observation survey data within their schools because it was recorded individually for all six-year-old children and formed the basis of the data analysis in this report. Only School F, however, routinely plotted these data and analysed them year by year in ways that allowed comparison over time and with national benchmarks, although School A aggregated the data every year in a different form and School D began to do so in Year Two.

The other four principals relied on their senior staff for their impressions of student success. These principals were particularly sensitive to how their teachers were feeling about using the approach to literacy and were more influenced by this criterion for judging success than gains in student achievement. For example, when the principal at School B was asked for the criteria he would use to judge the success of a programme, he said, *"I guess that you can judge a programme by the attitude of staff, and they do feel comfortable."* Similarly, the principal in School D replied to the same question, *"When I have a very, very happy staff."*

The reason given by the principal at School C for not yet examining the data was that she believed analysing data only 18 months after the course was completed was too soon to evaluate the achievement implications. As she said, *"I wasn't really expecting to until the end of the second year ... to give the programme a chance to prove itself and then make a value judgement."*



If these principals were to model data-based inquiry in their schools, then they would need to take a more active role in inquiring into the meaning of the data and the implications for management and teaching practice.

### **Professional Autonomy**

Findings related to three aspects of professional autonomy are reported. These include the re-organisation of roles and responsibilities, reasons teachers gave for including additional components in their literacy programmes and beliefs about professional autonomy.

**Reorganisation of Roles and Responsibilities.** Responses given by the principals to questions about the re-organisation of roles or responsibilities were very different in schools F and G from the others. Both principals indicated that once the commitment was made to implement the programme, the literacy leaders for the Year One syndicate were given the responsibility for and class release time to ensure consistency in programme implementation across all teachers. The assistant principal in School C also undertook this role on her own initiative by working in classes and helping teachers to implement the programme more effectively. However, she was not supported in this work by the principal in that the two teachers who did not wish to implement the approach to literacy, including the senior teacher, were not required by the principal to do so. In School E, the assistant principal took responsibility for helping her teachers implement the programme. But rather than intervene directly, this intervention involved supporting the teachers to solve self-identified problems and provide additional material resources that would assist the teachers to implement the approach and save them time.

The response of senior staff at Schools B and D to the question about changes in roles and responsibilities in the first year all fitted more closely with the expression “business as usual”. For example, in School B, the senior teacher remained responsible for checking planning and running the syndicate, although efforts to achieve greater consistency in implementation were introduced in the second year of implementation through classroom observations. The senior teacher in School D specifically mentioned that she did not see herself having a leadership role with the other teachers.



Although roles and responsibilities were not changed in School A, the principal reported in the feedback meetings that they made other changes, such as the selection for purchasing books, appointed a literacy leader and released staff to observe in her class.

Embedded within these responses to re-organisation is a level of intrusiveness the senior staff operated at the classroom level. In Schools F and G the teachers were given little choice to implement the approach to literacy and their implementation was monitored. The teachers accepted this monitoring because they could see the differences in the children's achievement and did not perceive it to be a problem. For example, in School F, one teacher said, *"We don't have any choice. But I don't mind"*. A second teacher felt that she did have a choice, but any change would need to be justified in terms of improved student achievement. She explained:

*"If we decided we weren't going to teach reading that way, or we weren't going to use word work, that sort of thing, we'd have that choice. But if our results were bad, she [the senior teacher] would want to know what is going on. She would definitely want to know what is going on."*

The senior staff in all other schools in the initial implementation year, in essence, respected the autonomy of the teachers to practice as they wished, although some attempted to influence the teachers' implementation through indirect mechanisms such as meeting discussions and provision of resources. In the second year, the assistant principal in School B attempted to create greater consistency in implementation, but as reported in Chapter Five, these attempts were resented by staff because they were seen to be disrespectful of their autonomy.

**Reasons for Retaining Previous Programme Components.** As noted in Chapter Five, in all the schools, except Schools F and G, at least one teacher talked about retaining elements from their old programmes that they had identified were not part of the this approach to teaching literacy. They typically based their reasons for retaining these elements on students' perceived needs (37 occasions), as illustrated by the following quote from a teacher in School B: *"You've got to allow for different learning styles so I think shared reading actually appeals to the children and also gives them something to read when they're working independently because they do need to be able to read a big book and poetry"*. A teacher from School C summed up the sentiments expressed by many others: *"We've all taken different approaches, we've all interpreted it differently,*



*maybe some teachers have put more emphasis on something that I haven't, or I've put more emphasis on something they haven't.... But I think it's a reflection of the kids in the class and their needs and adapting the programme to fit their needs."* School D's rejection of the full implementation of the approach was also supported by statements of perceived needs of the children, as the literacy leader explained, *"We have run an individual reading programme in our junior classes that we feel is meeting the needs of the children that come to our school and we have made a commitment to that."*

The position we are taking in this report is not that a recipe, such as a single approach to teaching literacy, should be slavishly followed and any deviations from a prescription treated as undesirable. Our concern is that the students' perceived needs were not tested against the desired outcomes, for most of these teachers did not have access to benchmarked outcomes or outcomes over time to determine if the retention of elements of previous programmes impacted on student achievement. Not surprisingly, none of the teachers in the five schools (A–E) referred to any data to support their case. The patterns in the achievement data would indicate that, in most of these schools, the addition of extra elements did not have a positive effect on outcomes overall. While teachers may be responding to immediate impressions of student need, if an inquiry stance were to be adopted, those impressions would need to be tested for their veracity.

The attitudinal differences in Schools F and G about making programme adjustments in relation to children's needs is reflected in different ways in the two schools. The teachers in School F rarely talked about children's needs in their interviews (two occasions), but when they did so it was in the context of the achievement information. For example, one teacher said in her interview, *"When we do the graphs twice a term, [the AP] will have a look at them and she will make a decision about the low ones – whether they need some extra help, that sort of thing."* Similarly, the teachers in School G rarely talked about children's needs in their interviews (two occasions), but instead in four instances mentioned teachers' needs, as one described, *"...we needed someone to model it, so the senior teacher modelled it."* This contrasts with the only other statement about teachers' needs in any of the interviews when a teacher in School A said, *"For a teacher to be effective, they need to really feel comfortable and secure in what they're doing."*

**Beliefs about Autonomy.** In the second phase of interviewing, we asked more directly about issues of professional autonomy. We asked teachers, literacy leaders and principals to indicate on a 5-point scale how much say each of the groups should have when





deciding whether to implement a new initiative, such as the ECPL approach to literacy. At the extreme of the scale was teachers (rating 1) or management (rating 5) having total say. A rating of 3 indicated equal say. The results are summarised in Table 5.2.

**Table 5.2**

**Ratings<sup>1</sup> of How Much “Say” Each Group Should Have When Deciding Whether to Implement a New Initiative, such as the ECPL Approach to Reading**

School	Principals	Literacy Leaders	Teachers
A	3	NA	3
B	3	4	2.8
C	4	4	2
D	4	3	3
E	3	3	2
F	4	4	3
G	4	3	2.7

<sup>1</sup> Note: A scale of 1–5 was used with 1 representing “Teachers should have total say”, 2 representing “Teachers should have most say”, 3 representing “Teachers and management should have equal say”, 4 representing “Management should have most say”, 5 representing “Management should have total say”.

There appears to be no particular pattern in these ratings for the groupings of schools. However, the principals who gave the same ratings made very different comments which reflect the different approaches in Schools F and G compared with the others. For example, the following principals all gave ratings of 4, represented by the descriptor “Senior teachers and management should have the most say”. The principal at School F said, *“I think that we have been successful because we have got the right management structure to make sure [the programme is implemented]. I think that I have come across very, very strongly in saying, ‘Well this is what we will be doing and this is what we are expecting’.”*

In contrast, the principal at School C, who also gave a rating of four, told the interviewer:



*Principal: There has been a little bit of resistance by some teachers to joining in the programme and I haven't insisted those teachers join in it.*

*Interviewer: Can you talk a bit about how you feel it is a teacher's right to say, "I don't want to do it. '?"*

*Principal: Yes I do, especially when they have tried it and didn't feel it was them ... If someone is that resistant, are they going to be doing a good job anyway? No they are not... I have a strong belief that people all teach in different ways. And, therefore, you should allow them to have the kind of flexibility to use their own strengths.*

The principal at School D explained his rating of four by saying:

*Principal: I would hate New Zealand staff to lose their autonomy. One of the reasons New Zealand is successful is staff autonomy.*

*Interviewer: What would lead you to decide whether they should adopt the ECPL approach or to stick with their programme?*

*Principal: I would only decide that if the teachers want to.*

The reasons for these latter two principals giving more say to senior staff than to teachers was the greater experience they brought to the task of teaching.

Closely aligned to these reasons for their ratings were the principals' descriptions of their role. While the principal in School F thought that her role was to make the hard decisions and to monitor the data, "*I see that data and I want to know*", the School D principal believed that his role was to "*Support the teachers and celebrate their successes.*"

The reasons for particular ratings, rather than the ratings themselves, showed different patterns between the groups of schools with differential student achievement. The principals in schools with high student achievement were clear about their role and gave teachers little choice about implementation once that decision was made. Others were more concerned to protect teachers' autonomy because they believed that this would have the greatest influence on whether or not they implemented the programme successfully.

As can be seen from Table 5.2, some teachers tended more towards teachers having the most say by nominating ratings of between 2 and 3. One teaching giving a rating of 2



from School E summed up the essence of others' answers: *"I think the teachers should have the say because they've taught the children. It's your classroom, it's your children. You're with them five days a week."* A teacher from School F captured the essence of answers rated 3: *"I would say about half and half, a teacher must be able to follow a programme but they must also feel that they have some control how it's implemented."*

A teacher from School B, who also gave a rating of 3, indicated how she balanced her own autonomy and her Literacy Leader's preferred approaches:

*Interviewer:* OK, so what would lead you to make a decision whether to do that or not?

*Teacher:* Just my own thinking. I'll probably just do it until someone comes along and has a look and says, "Mmm, what are you doing?" and I'll say, "Well, I'm doing that because I think it's best for my children". I'll still keep what they feel strongly about but I might just develop it ... Change it if I disagree with it. They should show me the way they do it, and let me come to my own conclusion.

### **Achievement as the Touchstone**

The last two chapters have considerable implications for the key tasks for leaders if they are to be instrumental in creating a school where data-based inquiry about raising student achievement is the stance towards its teaching practices. The usual foci, based on traditional conceptions of professionalism, that involve high levels of commitment and motivation from the teachers, while respecting autonomy of decision making, appears to have little impact on achievement. What appears to have greater impact is the analysis of both class and year level achievement data in terms of the implications for teaching practice and follow-up monitoring / support for implementation decisions. In this way, teachers develop a deep knowledge of the effectiveness of their practice and are more likely to hold themselves accountable for making a difference in data-based ways.

Descriptions such as these, however, do not necessarily assist leaders to identify what to do when faced with problems that need addressing. So we have chosen one example that in our experience presents a typical dilemma for leaders, "Who should identify problems?", and describe a traditional and inquiry-based approach to resolving this dilemma. This dilemma is often expressed in these terms – if a leader identifies a problem



before the teacher raises it, there is a strong probability that the teacher will perceive the leader as imposing his or her views, fail to develop ownership of the problem and reject suggestions for improvement. On the other hand, if all problems are teacher-initiated, then the problems that matter may never get discussed. We have selected extracts from two meetings to illustrate the dilemma and in the second extract illustrate how it might be resolved.

In the first meeting in School A, the teachers were talking about their writing programmes. After each person described and praised some of their children's best work the literacy leader went on to say:

*Literacy leader: I just wanted to have a time where we just actually shared, had a round about the organisation of your writing programme. How you've got it, whether you're happy with it, whether you feel like you'd like to change it. Whether you'd like some ideas there and all that sort of thing.*

Most teachers responded to this invitation by providing a neutral description of their writing programme (see Chapter Five). The only teacher who wanted assistance was concerned about what children should publish. She asked,

*Teacher: Do your children publish every story they write?*

*Literacy leader: Yes, mine do.*

*Teacher: That's where I have a slight problem because where does the creativity, the choice, the freedom for the children to actually try something and when it doesn't work they can discard it.*

*Literacy leader: Well, it does and then it comes into that conferencing time too. You see, the whole focus of getting them to write excellence is that if they come back to me with some things that I don't think are excellent – that's when we discard it and then they publish the bit out of it that is good. Yes, well that's cool.*

*Teacher: That's why I was asking – everyone else seems to get the children to publish every story they write and I don't know that I quite like that idea.*

*Literacy leader: So that's cool and you don't have to. I think that's fine. If you want to keep that part, you do that. I'm not saying you change that at all.*



In this context where the teacher raised the problem, the discussion could not proceed beyond expressions of preferred opinions. No data were available on “creativity” or “quality” in the different classrooms on which they could base their judgements about the appropriateness of the different preferences. It is difficult to see how this problem-solving process might connect to improved student achievement.

In contrast, the Literacy Leaders at Schools F and G identified problems, but did so through concerns about the children’s achievement that were evident in the data, then discussed specific teaching strategies. An example from a meeting in School F illustrates this point.

*Literacy leader: Let’s get on with the reading levels. Now I noticed in [Teachers One’s] class that Tama has had eleven weeks at school and he’s reading at level two. What is his problem?*

*Teacher One: He is away a lot.*

*Literacy leader: Is he managing his one-to-one [correspondence]?*

*Teacher One: Yes. He’s trying so hard at that and he’s working so hard – he knows ‘I’, and ‘to’, “I am running”.*

*Literacy leader: “I am running”, OK. If he’s mastered “I am running”, then he should be onto the next level. Has he got the strategies he needs?*

*Teacher One: One-to-one [correspondence] but he runs out of words to point to....*

*Literacy leader: Does he understand it? A lot of these children don’t understand it [one-to-one correspondence].*

*Teacher Two: What do you see? What do you say? That’s what they don’t understand.*

*Literacy leader: What? Do you mean that they don’t understand the question?*

*Teacher Two: They run out of words to say. They have no idea what we are asking.*

*Literacy leader: So I say to them, hide all your fingers – I only want to see one finger and read it with your finger. When they run out of words, then I ask the question.*

*Teacher Three: That’s what I do for reading recovery.*

*Literacy leader: While the child is pointing, are you doing this?*

*Teacher: No. I’ll have a try.*



By making the achievement data the touchstone for discussing problems and solutions, the leadership dilemma of “Who identifies problems?” disappears. The response from the senior teacher at School F to the request for the professional autonomy ratings about who should have the most say, management or teachers, describes her perspective:

*“These ratings don’t fit into the categories I want. I think that ... the basis should be the data that has been collected.”*

If the achievement information is agreed to be valid and the outcomes different for different approaches and / or teachers, then potential problems are identified but rarely are the solutions identified. Solutions are inevitably complex because the connections between teaching and learning are not straightforward. What the data do is define a beginning point, with the solution dependent on the professional expertise of those involved. In the first extract in an inquiry-based environment, resolution of the issue of how many stories to publish would be determined by testing if one approach led to higher levels of creativity or excellence than the other.

## Discussion

Traditional professional values of a specialised knowledge base, a commitment to meeting clients’ needs and the capacity to act autonomously may be necessary to achieve what is valued, but they do not appear to be sufficient to accomplish it. Every teacher and literacy leader involved in this study had access to a specialised knowledge base through the professional development. We do not doubt the genuine commitment of any of our respondents to meeting the needs and raising the achievement of the children in their care. Some had the information and opportunities to discover if that commitment actually resulted in raising achievement and were more successful in doing so. Others did not have access to the information and were less successful. Creating these opportunities in their professional school-based communities appears to be central to raising student achievement. This means, however, that traditional ideals of autonomy need to be replaced by autonomy matched with internal accountability in a data-based learning community. If teachers are to develop a knowledge-of-practice that is focused on achieving valued goals, they need to have access to the information to tell them how well they are progressing and the support to make needed changes.



The principal in School D, who is quoted at the beginning of the chapter, explained his role in terms of steering the school “ship from port to port”. Few in Mangere and Otara would contest the idea that one of the most essential destinations is to raise student achievement. For this to happen, all the stakeholders need to know about the achievement data, what progress is being made towards the port, what difference the individual and collective contributions are making, and what “course adjustments” are needed to get there.



## CHAPTER SIX

### CONCLUSIONS

In this study, we have shown that high-quality professional development may assist teachers to gain new skills and knowledge, but it is the school-based factors that determine whether that knowledge will be focused on bringing about significant changes in student achievement. The research literature on professional learning communities is more theoretical than empirical, but this study has provided empirical support for establishing such communities and some guidance on what is important. It also brings into question the worth of traditional measures of professional development or teaching effectiveness. Teachers' levels of motivation to implement new programmes, satisfaction with student achievement and feelings of success are unreliable indicators of the realities of student achievement.

#### **Data-based Professional Learning Communities**

In relation to the first issue of establishing professional learning communities in schools, we consider that the urgent issues to be addressed are how to establish the kinds of communities demonstrated in the two schools with high student achievement. How can such communities flourish in our schools where examining student achievement information for the implications for teaching practice becomes an integral part of schools' routines? To achieve this kind of practice, we believe that the message needs to be given at different levels of the education system. The recent introduction of the Education Standards Act (2001) now requires New Zealand primary schools to focus on achievement, set standards for that achievement and measure progress towards it. However, this requirement is unlikely to be sufficient unless school-based personnel perceive this process to be a learning rather than compliance exercise. Central to it becoming a professional learning exercise is to create a focus on achievement in the schools, with particular emphasis on the teaching-learning-achievement relationship. There is no reason to doubt that New Zealand teachers have traditionally focused on the teaching-learning relationship. If achievement is to improve, however, the focus needs to be more finely tuned towards testing the teaching-learning-achievement relationship.





Nearly all children learn. We need to focus on the adequacy of that learning and whether it is reflected in valued achievement outcomes.

An objection to this view may be that the achievement measures are not reflective of important learning and to assess children's learning in standardised tests belittles the deeper learning that is not evident in those tests. In this study, we deliberately chose measures on which children in Decile One schools usually achieve poorly and that reflect higher order reading skills. Children in these communities typically do well on measures of itemised knowledge such as letter identification and hearing and recording sounds in words (Phillips et al., 2001). Despite this, they do not typically do well in reading. We defend our measures as reflective of the most sophisticated levels of reading knowledge that can be expected at age six years.

Focusing on the teaching-achievement relationship and deprivatising professional practice around that achievement requires courage and contains many embedded leadership challenges. The data may show that the achievement is not as good as hoped. Achievement data can always be explained away if a non-learning orientation is adopted but needs an inquiry stance if those involved are to improve their practice as a result. The data may, of course, present pleasant surprises as it did for some of our teachers in the higher-achieving schools who tended to take a very critical stance towards their practice. In this case, the data indicate which practices should be continued. The contrasting responses of the teachers to our questions about potential negative uses of achievement data indicate that more fears exist about this issue for those who are not engaged in the practice of publicly examining achievement data for the implications for practice, than those who are so engaged. High levels of trust had developed in the two schools with high student achievement. The teachers understood problems evident in the achievement data meant more support in how to teach more effectively, not blame for failing to do it right. In some other schools, however, teachers who were more accustomed to practising privately and autonomously perceived that a potential negative use of the data might be that they would be made to teach differently. Unfortunately, preserving professional autonomy may come at the expense of student achievement.

Several of our meeting transcripts were about preferred pedagogical styles. In the absence of achievement information, preferred pedagogical styles can only be personal preferences and teachers' understandably object to being told that one style should be used in preference to another. This is not what we mean by data-based professional



learning communities. To establish these, the children's achievement must become the touchstone for pedagogical judgements and the issue of which particular teaching methods to use becomes irrelevant. All methods are tested for their effectiveness in improving student achievement. If one method is less effective, then adjustments need to be made. This inquiry into practice requires a new definition of professionalism. Adherence to an ideal of professional autonomy is not sufficient.

While professional attitudes are fundamental to building professional learning communities, we wish also to acknowledge the skills involved. We were fortunate that high quality, standardised measures at six years were available for the schools and the research. These measures were rarely used in the study schools to contribute to professional discussions, but this was not entirely an attitudinal problem, it also related to skill. Two schools involved in this study decided during the second year to aggregate these results and determine what they meant for the teachers involved. Both literacy leaders and teachers struggled with the skills involved in this new and unfamiliar exercise. A recently released report on how 15 schools in Mangere and Otara analysed and used student achievement data (Timperley & Lam, 2002) identified many of the skills that needed to be acquired to do this successfully.

### **Effective Personal Development**

In these last few paragraphs we turn to discussing the issues around traditional measures of professional development or teaching effectiveness. As Guskey (1998) warns, "happiness quotients" are inadequate measures of the effectiveness of professional development. Nearly all the literacy leaders and teachers in our study valued the professional development and were highly motivated to implement it. The results for their students, however, were very different. Although high levels of teacher motivation might be necessary for changes in student learning to occur, they are not sufficient. More rigorous measures need to be adopted to evaluate the worth of engaging in particular professional development activities.

Even more institutionally embedded than "happiness" indicators, however, are participatory indicators as being reflective of effective professional learning. In the New Zealand situation performance appraisal systems are required to have an integrated professional development component (Ministry of Education, 1998) and professional

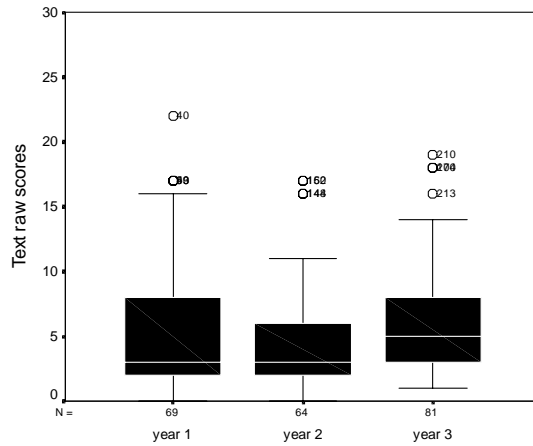


standards are strongly participatory. Primary teachers are required to encourage others and to participate in professional development (Education Review Office, 2000, Section 3.2) and secondary teachers are required to demonstrate commitment to their own ongoing learning and participate individually and collaboratively in professional development activities (Education Review Office, 2000, Section 3.2). What evidence do we have that these activities, in fact, impact positively on student achievement? In Chapter One, we cited Camburn (1997) who reminds us that the public school system is ultimately in the business of educating students, not teachers. Like “happiness” measures, participation in professional development may be necessary for teachers to raise the achievement of students, but the findings of our study indicate that it is not sufficient. If we are to test the relationship between participation in professional development and improved student achievement, larger systems than individual schools need to engage in data-based inquiry about effectiveness because this is a systemic, rather than an individual school, issue. Professional standards and guidelines for performance appraisal are centrally developed. Similar guidelines for effective professional development, based on data, might assist schools and national initiatives to judge whether the resources put into professional development achieve their desired outcomes.

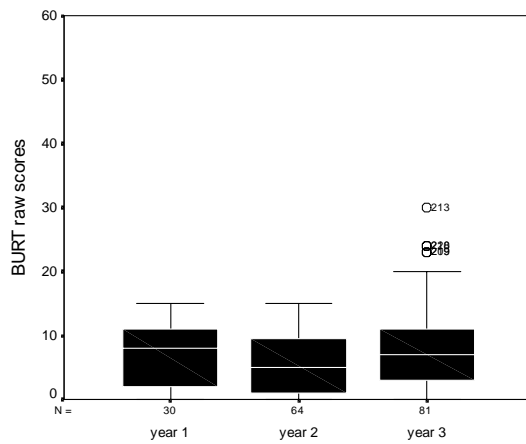


## APPENDIX ONE: Text, BURT and reading scores for each school

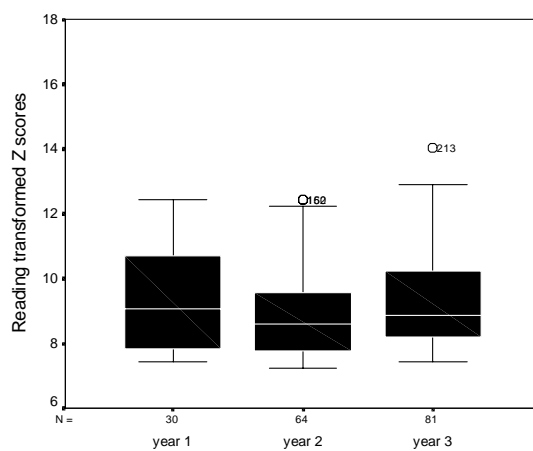
Plot of Text Raw Score of School A over Three Years



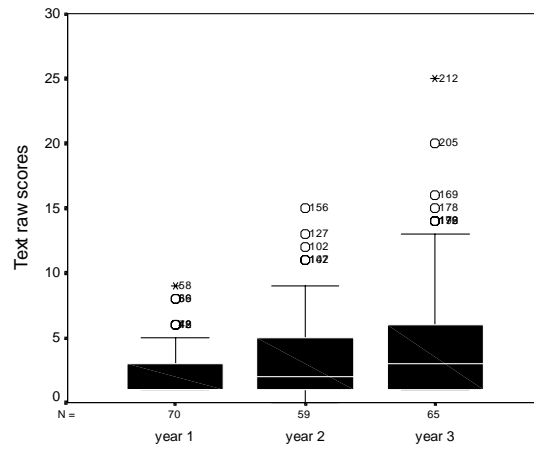
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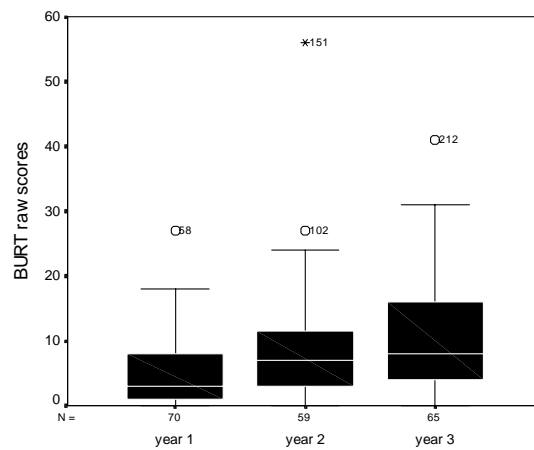
Plot of Reading Transformed Z-Scores of School A over Three Years



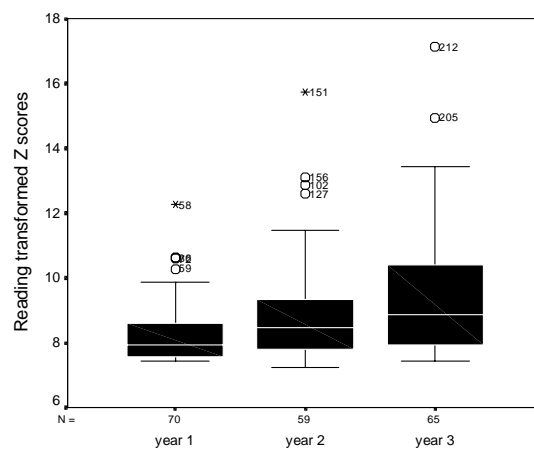
Plot of Text Raw Score of School B over Three Years



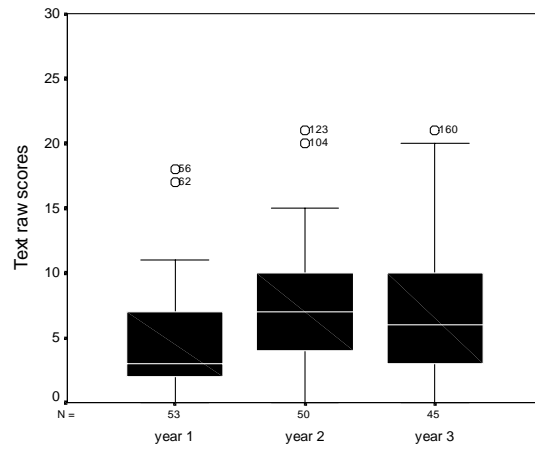
Plot of BURT Raw Scores of School B over Three Years



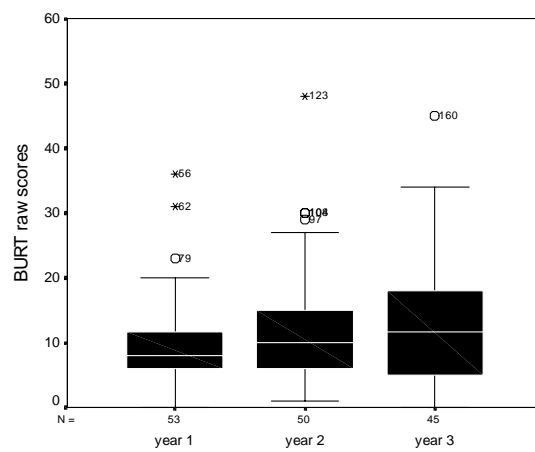
Plot of Reading Transformed Z-Scores of School B over Three Years



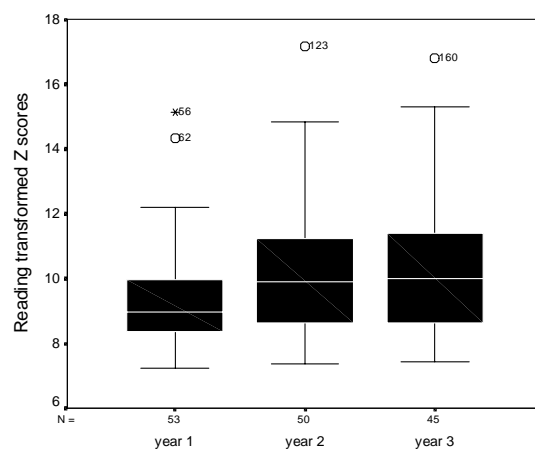
Plot of Text Raw Score of School C over Three Years



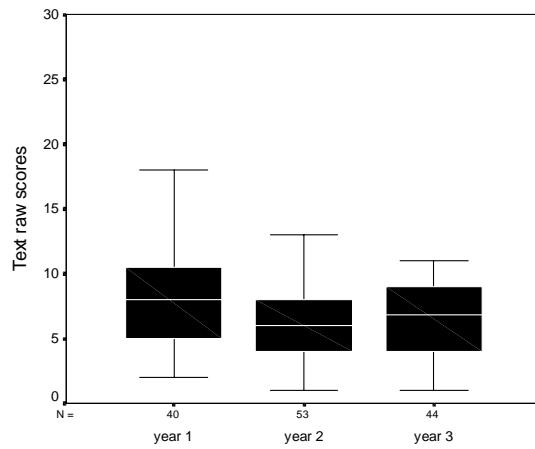
Plot of BURT Raw Scores of School C over Three Years



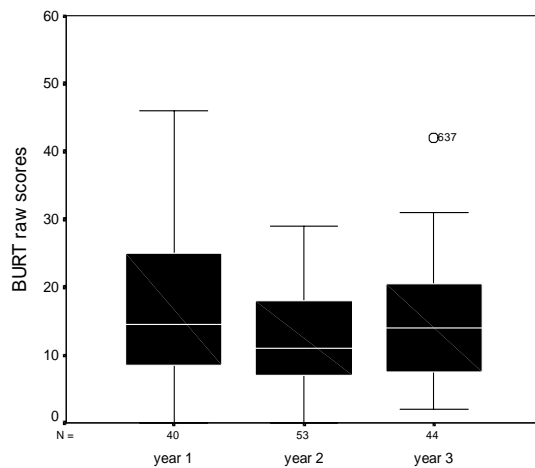
Plot of Reading Transformed Z-Scores of School C over Three Years



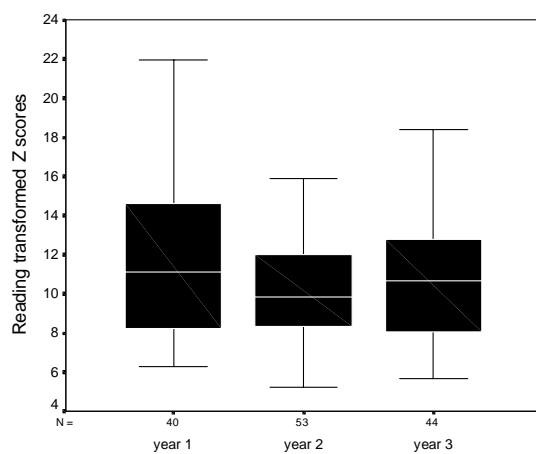
Plot of Text Raw Scores of School D over Three Years



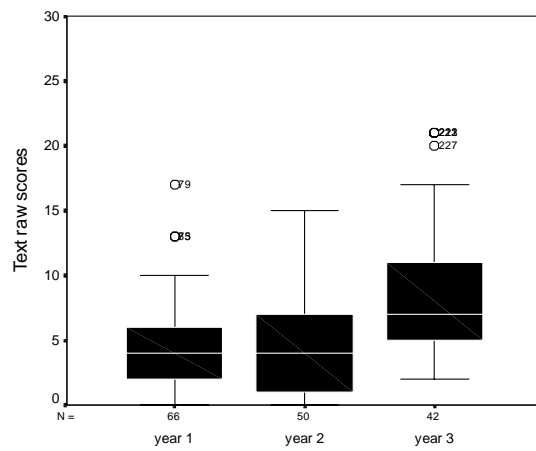
Plot of BURT Raw Scores of School D over Three Years



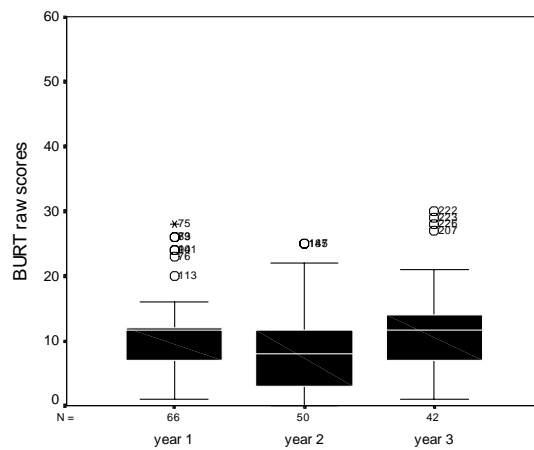
Plot of Reading Transformed Z Scores of School D over Three Years



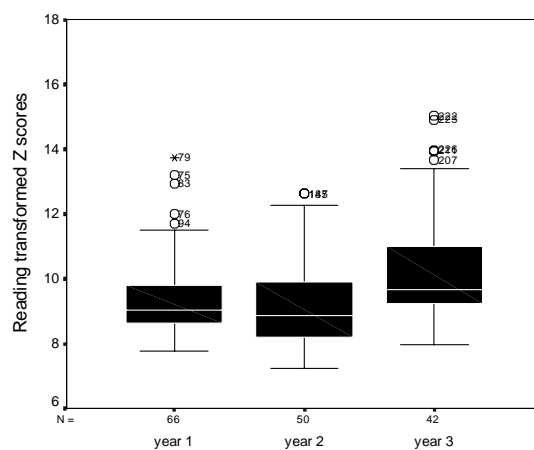
Plot of Text Raw Score of School E over Three Years



Plot of BURT Raw Scores of School E over Three Years

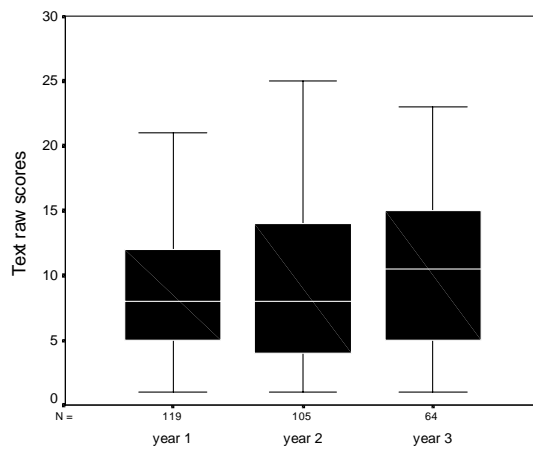


Plot of Reading Transformed Z-Scores of School E over Three Years

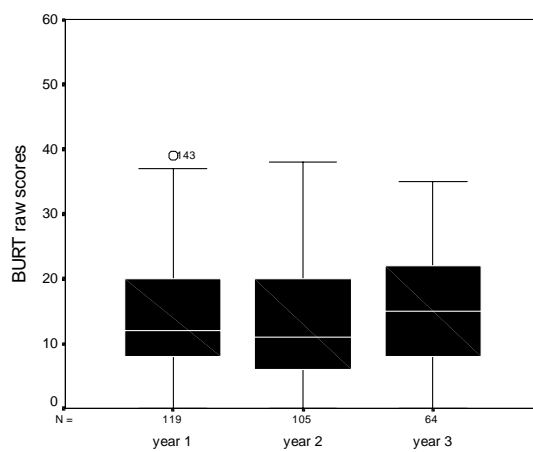




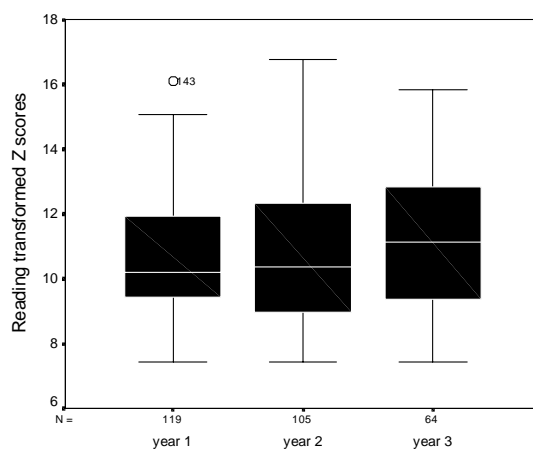
Plot of Text Raw Score of School F over Three Years



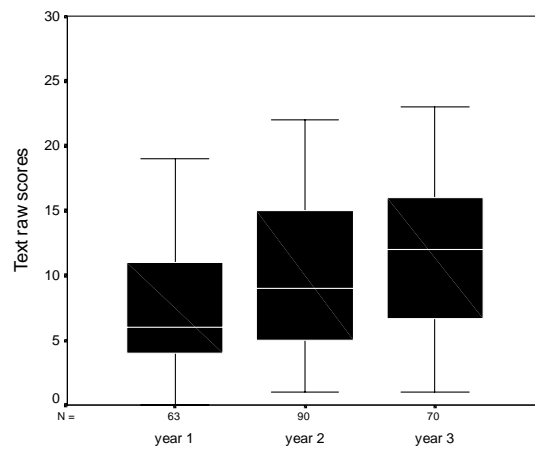
Plot of BURT Raw Scores of School F over Three Years



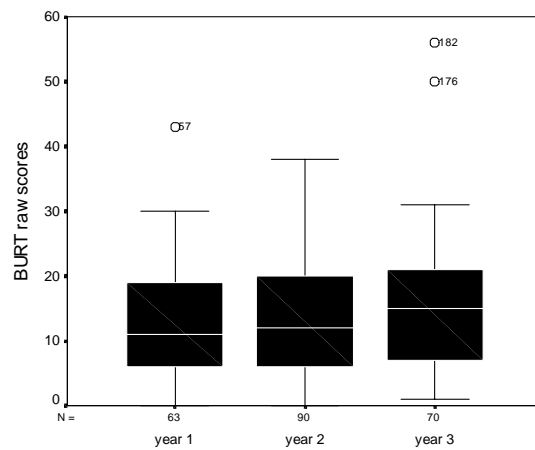
Plot of Reading Transformed Z-Scores of School F over Three Years



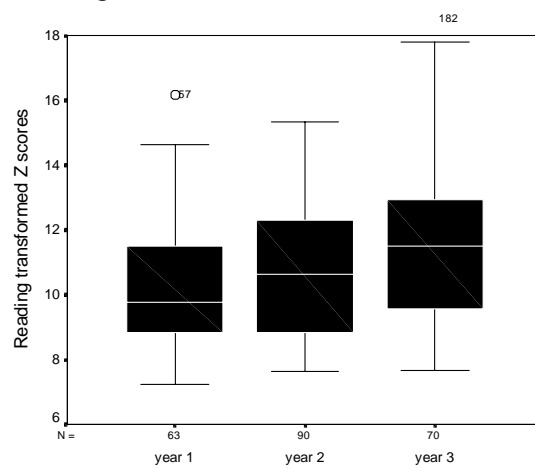
Plot of Text Raw Score of School G over Three Years



Plot of BURT Raw Scores of School G over Three Years



Plot of Reading Transformed Z-Scores of School G over Three Years



## APPENDIX TWO: Meeting analysis coding

<p>A.1. Data collection</p> <p>A.1.a. Data needed – non-teaching related (e.g. children with / without ECE)</p> <p>A.1.b. Data needed – teaching related</p> <p>A.1.c. Data analysis needed</p>
<p>A.2. Data descriptions</p> <p>A.2.a. Neutral descriptions (for understanding)</p> <p>A.2.b. Positive evaluation of children’s achievement</p> <p>A.2.c. Negative evaluation of children’s achievement</p>
<p>A.3 Data explanation / implications / problems</p> <p>A.3.a. Identifying problems with quality of data</p> <p>A.3.a.i. Problems justified</p> <p>A.3.a.ii. Problems unjustified</p> <p>A.3.b. Non-school related implications (e.g. home, child, ECE)</p> <p>A.3.c.i School – not teacher / class related (e.g. resources, class size, problems with management)</p> <p>A.3.c.ii Children’s attendance</p> <p>A.3.d. Teaching / teacher related</p> <p>A.3.d.i. Teacher / child non-specific (a general issue for all or some unidentified teachers / children)</p> <p>A.3.d.ii. Teacher / child specific</p>
<p>A.4. Solutions to problems arising from data</p> <p>A.4.a. Home changes</p> <p>A.4.b. School changes (e.g. resources, class size)</p> <p>A.4.c. Teaching solutions</p> <p>A.4.c.i. Teacher / child non-specific (a general issue for all or some unidentified teachers / children)</p> <p>A.4.c.ii. Teacher / child specific</p>
<p>B. Non-data based discussions – teaching and learning</p> <p>B.1 Descriptions of teaching practice / programmes (including how a programme should be undertaken)</p> <p>B.2. Positive evaluations of teaching / programmes</p> <p>B.3 Negative evaluations of teaching / programmes</p> <p>B.4. Teaching problems identified</p> <p>B.4.a. Self identified problems</p> <p>B.4.a.i. Unprompted by others (may be in response to a general invitation)</p> <p>B.4.a.ii. Prompted by others (e.g. In response to a specific question)</p>



<ul style="list-style-type: none"> <li>B.4.b.i. General to all teachers</li> <li>B.4.b.ii. Specific to a teacher</li> <li>B.4.c. School organisational problems identified</li> <li>B.4.d. Non-school related problems identified</li> <li>B.4.e. Problems with meeting process discussed</li> <li>B.5. Teaching solutions identified <ul style="list-style-type: none"> <li>B.5.a. Solution to self-identified problems</li> <li>B.5.b. Solutions to other-identified problems <ul style="list-style-type: none"> <li>B.5.b.i. General to all teachers</li> <li>B.5.b.ii. Specific to identified teacher</li> </ul> </li> <li>B.5.c. Solution to unidentified problem</li> <li>B.5.d. Solution depending on others (e.g. parent help)</li> <li>B.5.e. Solution to school organisational problems</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>C. Observation feedback <ul style="list-style-type: none"> <li>C.1 Observation planning</li> <li>C.2. Observation feedback arising from achievement data (sub-codes in this category were not required)</li> <li>C.3. Observation / feedback arising from programme implementation (independent of achievement data) <ul style="list-style-type: none"> <li>C.3.a. Neutral descriptions (e.g. this is how I do it)</li> <li>C.3.b. Teaching problems identified <ul style="list-style-type: none"> <li>C.3.b.i. General (all teachers or problem teacher not identified)</li> <li>C.3.b.ii. Specific to teacher / children in class</li> </ul> </li> <li>C.4.a Teaching solutions identified <ul style="list-style-type: none"> <li>C.4.a.i. General (all teachers or problem teacher not identified)</li> <li>C.4.a.ii. Specific to teacher / children in class</li> </ul> </li> </ul> </li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>D. Professional development <ul style="list-style-type: none"> <li>D.1. Problems with professional development</li> </ul> </li> <li>E. Distractors e.g. off-loading about individual children, talking about children who had left school</li> <li>F. Other e.g. unrelated organisational issues</li> </ul>



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